

MONETARY POLICY AND THE STATE OF THE ECONOMY

HEARING BEFORE THE COMMITTEE ON FINANCIAL SERVICES U.S. HOUSE OF REPRESENTATIVES ONE HUNDRED EIGHTH CONGRESS FIRST SESSION

FEBRUARY 11, 2004

Printed for the use of the Committee on Financial Services

Serial No. 108-67



U.S. GOVERNMENT PRINTING OFFICE

93-425 PDF

WASHINGTON : 2004

For sale by the Superintendent of Documents, U.S. Government Printing Office
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MONETARY POLICY AND THE STATE OF THE ECONOMY

Wednesday, February 11, 2004

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON FINANCIAL SERVICES,
Washington, D.C.

The committee met, pursuant to call, at 11:04 a.m., in Room 2128, Rayburn House Office Building, Hon. Michael G. Oxley [chairman of the committee] presiding.

Present: Representatives Oxley, Leach, Baker, Castle, Royce, Lucas of Oklahoma, Ney, Kelly, Paul, Gillmor, Ryun, Manzullo, Jones, Ose, Toomey, Hart, Capito, Feeney, Hensarling, Garrett of New Jersey, Murphy, Brown-Waite, Barrett of South Carolina, Harris, Frank, Kanjorski, Waters, Sanders, Maloney, Velazquez, Watt, Hooley, Carson, Sherman, Meeks, Lee, Inslee, Moore, Capuano, Hinojosa, Lucas of Kentucky, Crowley, Clay, Israel, Ross, McCarthy, Baca, Miller, Emanuel, Scott, Davis, and Bell.

The CHAIRMAN. This hearing of the Committee on Financial Services will come to order.

We are meeting today to receive the semiannual testimony of the Chairman of the Federal Reserve Board of Governors. Pursuant to the Chair's prior announcement and Rule 3(f)(2) of the rules of the committee, the Chair will recognize the Chairs and ranking members of the full committee and the Subcommittee on Domestic and International Monetary Policy, Trade, and Technology, leave their respective designees for opening statements. The statements of all the members may be placed in the record.

The Chair now recognizes himself for 5 minutes.

Good morning, Mr. Chairman, and welcome back to the committee. All of us on the Financial Services Committee look forward to our discussions with you on U.S. economic performance, which so directly affects the lives and livelihoods of all Americans.

At this unique moment of war and renewal there are many who deserve credit for the recovering economy. First and foremost are the American people, the American investor who never panicked and never lost faith, and the American consumer who believes that the economy will continue to improve.

Our American companies have retooled in accordance with the Sarbanes-Oxley Act, thus improving financial reporting and bolstering confidence. Our markets continue to be the most productive capital creation organizations in the world.

Despite predictions that companies would delist, they have not done so. In fact, companies continue to seek new listings in our deep and vibrant U.S. markets.

Mr. Chairman, the economy is recovering nicely from the mild recession of 2001. The market is back to pre-recession levels, fixed investment is up, unemployment is down from its peak, exports are up, the balance of payments is down, and none of the Blue Chip 50 forecasters predict growth rates of less than the mid-3 percent rate or inflation higher than the mid-2 percent range for this year or next. Most of the Blue Chip forecasts are much more optimistic.

Two items that have everyone's attention are the employment figures and the deficit numbers. There is understandable concern about both. I am sure we would all prefer budget surpluses and would like every American who seeks a job to have one right now. However, I believe these are temporary problems attributable to temporary conditions.

Despite some alarmist commentary, the deficit of numbers for this year are understandable given the terror attack, a recession, corporate governance problems, and war. While they are higher than we would like, even after all of these events the deficit is still at about 3.5 percent of GDP. According to the President's budget, the deficit will be half that level in 5 years. The alternative would be to stop investing in economic stimulus or to fight against terror on the cheap, and I don't think the American people would want either of these options.

Mr. Chairman, I know you favor pay-as-you-go budgeting. However, the President's tax cuts have helped to sustain the U.S. economy, especially in the face of recent shocks. In addition to the headline grabbers of terrorism, war, and corporate scandal, we faced a European currency unit that sank in value by a third, which damaged the value of our exports.

Regarding employment levels, Mr. Chairman, I hope that you will be able to add some perspective to the national debate. When I studied economics and until just a few years ago, the accepted theory was that roughly 6 percent was considered full employment. This is about where we are now. During the bubble economy of the late 1990s, that rate went down in the 4 percent range and briefly hovered near 3.9 percent. To many of us it seemed as if one of the laws of economics had been repealed. Then, with the recession, unemployment increased again over 6 percent, though I should quickly add that we have been seeing steady job creation since last July.

Mr. Chairman, I think most of us on both sides of the aisle believe the American economy will create additional jobs and their quality will improve as the economy continues to adapt to changing times. We would welcome your thoughts on job creation and what we in Congress might do to help.

With that, Mr. Chairman, I look forward to your appearance here again, which is always a great occasion for this committee. We thank you for your stewardship of the economy.

And I now yield to the gentleman from Massachusetts, Mr. Frank, for his opening statement.

[The prepared statement of Hon. Michael G. Oxley can be found on page 46 in the appendix.]

Mr. FRANK. Thank you, Mr. Chairman.

Chairman Greenspan, in your appearance today I think you come at a time when one of the subjects that is often debated here, namely the appropriate level for the interest rates that you set, is

not really controversial. There is a general consensus that the current rate is appropriate. Indeed, we are apparently a sort of historic low, at least in recent times, both for your weight and interest rates, and I congratulate you on both.

But there is a broader set of questions that is really deeply troubling. We may be at an inflection point in the American economy, and I think we are at the point where the old phrase of political economy has become very relevant because we are, as has been noted, in a period of growth, significant growth.

We are coming out of a recession. Unfortunately, we are coming out of this recession with less job growth than we have seen, I think, ever, and certainly in any recent history. To the extent that there is something somewhat prolonged about this—I won't say permanent because nothing is permanent, but if it is prolonged, and today we have this problem, it does appear clearly that the amount of job growth we are getting, given the level of GDP, has dropped significantly.

What we have, however, is not simply that fact. There is a growing perception in the country that the benefits of growth and of increased productivity are being very unequally shared, excessively unequally shared.

Let us be very clear. We are capitalists, as we should be. Inequality is not a bad thing; it is necessary to our system. Our market system with its incentives and its allocation mechanisms doesn't work without inequality. On the other hand, I think it is clear that inequality left entirely unchecked might get out of the bounds where it is reasonable. And too much inequality can have serious negative consequences.

I think our job is, in part, to try to contain excessive inequality, because we can't have inequality that is more than we need for efficiency—we obviously need some—and can have damaging social consequences. I think we are on the verge of that.

Three levels: First of all, there are the real effects of inequality—people without jobs, people without health care, people inadequately educated. I and many of my colleagues are moved primarily by that. But I recognize that dwelling simply on the moral aspects and the social cost of inequality may not be enough.

As Adlai Stevenson once said when he was told he had all the thinking people on his side, Yes, but I need a majority. Because it was cracks like that that helped him not get a majority.

But I don't, unfortunately, believe that moral arguments are enough, so let me give you two other arguments, some of which you have yourself, I think, taken note of as to why we have got to tackle this inequality thing which is being exacerbated by the reality today of jobs which are lagging what they should be by normal rules in the economy.

Essentially what we have, I think, is a situation in which a combination of factors—and you talked about this in the recent speech about flexibility. The rewards of capital have, I think, gone beyond what they should be relative to labor. That is, I think there is both the reality and certainly a perception—I believe the reality—that the owners of capital are getting a disproportionately unequal share, damagingly so, of the gains.

Now, that is partly by technology, it is partly by a number of real economy factors, but it has been exacerbated by public policy—not by the fact of tax cuts, but by the composition of the tax cuts, by policies that have eroded the ability of organized labor to represent people, by a failure to keep the minimum wage updated, by a number of policies, by the way in which globalization has been pursued. And in consequence you have the following, not simply, as I said, the negative consequences.

You have a resistance in this country increasingly to policies that you and many others think are in our best interest. Trade treaties will have a very hard time. The objections to outsourcing, no matter what the Chairman of the Council of Economic Advisers says about it, you are going to see increasing legislation restricting outsourcing. You are seeing difficulty in other public policies that people think are in our overall interest.

And the reason is in part—I was in Davos, and I heard someone make a very interesting formulation; namely, that inequality has two aspects, between countries and within countries. Now, globalization has as its advantage reducing inequality between countries. But if it is carried out in a way that exacerbates inequality within countries, resistance will grow. And we are at that point.

So we are at that point—and I will finish in 30 seconds, Mr. Chairman. We are at the point where I believe that resentment at the excessive inequality is now an obstacle to many of the policies you would like to see and you warn against them.

And finally—and this one isn't certain yet, but we may be reaching a point, if we cannot change the situation or if the situation doesn't change, if job growth does not accelerate, it could have macroeconomic effects. To the extent that job gains are not what we would ordinarily see both in real spending power and in perception and consumer confidence, you may begin to see the consumer spending sector lag and not do what it ought to do in our economy.

So, as I said, it is not just the morality of it. Clearly, we are at the point where political resistance to much of what you think is wise in terms of increased efficiency, and increased flexibility is a significant factor, and we may be at the point where macroeconomically this also is a problem.

The CHAIRMAN. The gentleman's time has expired.

The Chair now recognizes the gentlelady from New York, Mrs. Kelly.

Mrs. KELLY. Thank you, Mr. Chairman.

Over the past 2-1/2 years, our country has experienced monumental and extraordinary events that shaped the nature of our work here in Washington and shaped our agenda. When we began last Congress, little did we know that we were going to be moving to block terrorist financing, oversee the longest close of the securities market since World War I, and push legislation that had to be pushed through to ensure the availability of commercial terrorism insurance. Certainly, I don't think anyone could have predicted the collapse at that point of Enron, Global Crossing, and WorldCom, or the subsequent loss of confidence that our markets endured.

But our committee and this Congress responded quickly to restore stability and confidence for the American people, and we

passed legislation to improve our security and dry up terrorist financing with the Patriot Act.

As we crafted legislation, and especially the Sarbanes-Oxley Act, we were directed to try to improve on——

The CHAIRMAN. You might make sure your mike is on.

Mrs. KELLY. My mike is on. Yes, it is.

We crafted legislation to improve corporate responsibility and increase the accounting oversight. We also passed legislation that would stimulate the economy. And we are very pleased, Mr. Chairman, that the Federal Reserve chose to keep the interest rates down and keep ratcheting them down, which helped to bring—stabilize the economy and bring our economy now into the more active phase that we have entered.

I think with these reforms and many others, we all feel like protecting the security of the American people—whether it is national security, health, or economic and retirement security—is the most important thing that we should be doing here.

Today, as we hear from you, Mr. Greenspan, Chairman Greenspan, I know members of the committee have a lot of important questions, but I think most of us are very concerned about what our ranking member just spoke about. And that is, we need to know how—what we can do, what you are doing and what we can do, from implying from what you say to us this morning, to continue to strengthen our dollar and to create new jobs and to support this economic growth.

I thank you, Mr. Chairman, for appearing with us here today, and I look forward to your testimony.

The CHAIRMAN. The gentlelady yields back.

The Chair is now pleased to recognize the gentlelady from New York, Mrs. Maloney.

Mrs. MALONEY. Thank you, Mr. Chairman.

And good morning, Mr. Greenspan.

As Americans watch the hearing today, for many, their greatest economic concerns are the loss of 3 million private-sector jobs and a record-breaking \$521 billion deficit. Despite improvement in some economic statistics, including GDP growth, the economy continues to perform extraordinarily poorly for the many people without jobs and for the large number of people with jobs who aren't enjoying any wage growth.

The Fed had done its part by putting its foot on the gas; the Federal funds rate is effectively zero. But we still have a net job loss of 2.2 million jobs, and President Bush is on track to be the first president since Herbert Hoover to end his term with fewer jobs than when he started.

The President claims to have a plan for both the jobs crisis and the deficit. The administration now says 2.6 million jobs will be created this year, and that their budget will cut the deficit in half in 5 years. Yet, a year ago, the administration estimated that nearly 2 million jobs would be created in the second half of 2003, and only 200,000 jobs were produced. Even worse, the President's chief economist is now praising the outsourcing of U.S. jobs to foreign countries. Headlines across the country responded with astonishment this week, reading, Bush Supports Shift of Jobs Overseas. And here we have some of the headlines across the country.

On the spending side, the President's new budget is a total fiction. Already the claim that it will cut the deficit in half in 5 years has been panned by Goldman Sachs, the Concord Coalition, the Committee for Economic Development, and Decision Economics, all of whom continue to forecast \$500 billion deficits and more into the future.

The administration claims it will control spending by limiting domestic discretionary spending to under 1 percent this year, but domestic discretionary spending is only 15 percent of the entire budget, not enough to make a serious impact.

The budget also totally misleads by leaving out spending we know is coming, including but not limited to post-election funding for our troops in Afghanistan and Iraq; the long-term cost of the President's number one domestic priority, making tax cuts permanent; the cost of fixing the alternative minimum tax; the President's Mars space initiative; and more.

Chairman Greenspan, I hope you will address the problems of the job deficit and the budget deficit at length in your testimony today. Thank you for being here.

The CHAIRMAN. The gentlelady's time has expired.

We now turn to the distinguished Chairman of the Fed, Chairman Greenspan. Thank you again for appearing, and welcome back.

[The prepared statement of Hon. Carolyn B. Maloney can be found on page 55 in the appendix.]

STATEMENT OF ALAN GREENSPAN, CHAIRMAN, FEDERAL RESERVE SYSTEM

Mr. GREENSPAN. Thank you very much, Mr. Chairman.

Before I start, I would like to wish you a happy birthday. And as said to you inside, I trust you will soon be shooting your age on the golf course. The trouble is, you probably will.

The CHAIRMAN. Mr. Chairman, I hope I am playing with you at the time.

Mr. GREENSPAN. I will be duly impressed.

May I request that the full statement that I am about to excerpt from be included for the record?

The CHAIRMAN. Without objection.

Mr. GREENSPAN. Mr. Chairman and members of the committee, I am pleased to be here today to present the Federal Reserve's Monetary Policy Report to the Congress. When I testified before this committee in July, I reported that conditions had become a good deal more supportive of economic expansion over the previous few months. A notable reduction in geopolitical concerns, strengthening confidence in economic prospects, and an improvement in financial conditions boded well for spending and production over the second half of the year. Still, convincing signs of a sustained acceleration and activity were not yet in evidence.

Since then, the picture has brightened. The gross domestic product expanded vigorously over the second half of 2003. Progress in creating jobs, however, has been limited.

Looking forward, the prospects are good for sustained expansion of the U.S. economy. At the same time, increases in efficiency and

a significant level of underutilized resources should help keep a lid on inflation.

In retrospect, last year appears to have marked a transition from an extended period of subpar economic performance to one of more vigorous expansion. Once again, household spending was the mainstay. Last year's reductions in personal income tax rates and the advance of rebates to those households that were eligible for the expanded child tax credit boosted the growth of real disposable personal income. The very low level of interest rates also encouraged household spending through a variety of channels.

The strengthening in capital spending over 2003 contributed importantly to the acceleration of real output. A growing confidence of business executives and the durability of the expansion, strong final sales, the desire to renew capital stocks after replacements had been postponed, and favorable financial conditions all contributed to a turnaround in equipment spending.

To a considerable degree, the gathering strength of capital spending reflects a substantial improvement in the financial condition of businesses over the past few years. Firms' profits rose steeply during 2003, following smaller gains in the previous 2 years. The profitability of the business sector was again propelled by a stunning increase in productivity. The vigorous advance represents a notable extension of the pick-up that started around the mid-1990s. Apparently, businesses are still reaping the benefits of the marked acceleration in technology.

The strong gains in productivity, however, have obviated robust increases in business payrolls. To date, the expansion of employment has significantly lagged increases in output. Gross separations from employment, two-fifths of which have been involuntary, are about what one would have expected from past cyclical experience, given the current pace of output growth. New hires and recalls from layoffs, however, are far below what historical experience indicates. To a surprising degree, firms seem to be able to continue identifying and implementing new efficiencies in their production processes, and thus have found it possible so far to meet increasing orders without stepping up hiring.

Productivity over the past few years has probably received a boost from the efforts of businesses to work off the stock of inefficiencies that had accumulated in the boom years. As those opportunities to enhance efficiency become scarcer and as managers become more confident in the durability of the expansion, firms will surely once again add to their payrolls.

A consequence of the rapid gains in productivity and slack in our labor and product markets has been sustained downward pressure on inflation. Inflation last year was in a range consistent with price stability. The recent performance of inflation has been especially notable in view of the substantial depreciation of the dollar in 2003. Ordinarily, currency depreciation is accompanied by a rise in dollar prices of imported goods and services because foreign exporters endeavor to avoid experiencing price declines in their own currencies which would otherwise result from the fall in the foreign exchange value of the dollar.

Reflecting the swing from dollar appreciation to dollar depreciation, the dollar prices of goods and services imported into the

United States have begun to rise after declining on balance for several years, but the turnaround to date has been mild.

Although prospects for the U.S. economy look quite favorable, we need to remind ourselves that all forecasts are projections into an uncertain future. The fact that most professional forecasters perceive much the same benign short-term outlook that is our most likely expectation provides scant comfort. When the future surprises, history tells us, it often surprises us all. We must, as a consequence, remain alert to risks that could threaten the sustainability of the expansion.

Besides the chronic concern about a sharp spike in oil or natural gas prices, a number of risks can be identified. Of particular importance to monetary policymakers is the possibility that our stance could become improperly calibrated to evolving economic developments. To be sure, the Federal Open Market Committee's current judgment is that its accommodative posture is appropriate to foster sustainable expansion of economic activity. But the evidence indicates clearly that such a policy stance will not be compatible indefinitely with price stability and sustainable growth. The real federal funds rate will eventually need to rise toward a more neutral level. However, with inflation very low and substantial slack in the economy, the Federal Reserve can be patient in removing its current policy accommodation.

The outlook for the Federal budget deficit is another critical issue for policymakers. As you are well aware, after a brief period of unified budget surpluses around the beginning of this decade, the Federal budget has reverted to deficits. Budget projections from the Congressional Budget Office and the Office of Management and Budget indicate that very sizeable deficits are in prospect in the years to come.

As I have noted before, the debate over budget priorities appears to be between those advocating additional tax cuts and those advocating increased spending. Although some stories in recent weeks in the Congress and elsewhere have been directed at actions that would lower forthcoming deficits, to date, no effective constituency has offered programs to balance the budget. Our demographics, especially the retirement of the baby boom generation beginning in just a few years, mean that the ratio of workers to retirees will fall substantially. Without corrective action, this development will put substantial pressure on our ability in coming years to provide even minimal government services while maintaining entitlement benefits at their current level without debilitating increases in tax rates.

The fiscal issues that we face pose long-term challenges, but Federal budget deficits could cause difficulties even in the relatively near term. Should investors become significantly more doubtful that the Congress will take the necessary fiscal measures, an appreciable backup in long-term interest rates is possible, as prospects for outsized Federal demands on national saving become more apparent.

Addressing the Federal budget deficit is even more important in view of the widening U.S. current account deficit. These deficits are related because the large Federal dissavings represented by the budget deficit, together with relatively low rates of U.S. private

saving, implies a need to attract savings from abroad to finance domestic private investment spending. To date, the U.S. current account deficit has been financed with little difficulty. Nonetheless, given the already substantial accumulation of dollar-denominated debt, foreign investors, both private and official, may become less willing to absorb ever-growing claims on U.S. residents.

Taking steps to increase our national saving through fiscal action to lower Federal budget deficits would help diminish the risks that a further reduction in the rate of purchase of dollar assets by foreign investors could severely crimp the business investment that is crucial for our long-term growth.

The large current account deficits and the associated substantial trade deficits pose another imperative, the need to maintain the degree of flexibility that has been so prominent a force for U.S. economic stability in recent years. The greatest current threat to that flexibility is protectionism. The costs of any new protectionist initiatives in the context of wide current account balances could significantly erode the flexibility of the global economy; consequently, creeping protectionism must be thwarted and reversed.

In summary, Mr. Chairman, in recent years, the U.S. economy has demonstrated considerable resilience to adversity. It has overcome significant shocks that in the past could have hobbled growth for a much longer period than they have in the current cycle. As I have noted previously, the U.S. economy has become far more flexible over the past 2 decades, and associated improvements have played a key role in lessening the effects of the recent adverse developments on our economy.

Looking forward, the odds of sustained robust growth are good although, as always, risks remain. The Congress can help foster sustainable expansion by taking steps to reduce Federal budget deficits and, thus, contribute to national saving and by continuing to pursue opportunities to open markets and promote trade.

For our part, the Federal Reserve intends to use its monetary policy tools to promote our goals of economic growth and maximum employment of our resources in an environment of effective price stability.

Thank you, Mr. Chairman. I look forward to your questions.

[The prepared statement of Hon. Alan Greenspan can be found on page 57 in the appendix.]

The CHAIRMAN. Thank you, Mr. Chairman.

And let me begin by referring to what I indicated in my opening remarks. That is, most of us, when we studied economics, were led to believe that 6 percent was considered to be full employment. And because of the boom in the late 1990s, some would say maybe a "bubble," the unemployment rate went down at one point briefly to 3.9 percent.

Was the 3.9 or 4 percent an aberration? Would we expect to come back to what would traditionally be 6 percent? I think even the Humphrey-Hawkins legislation was based on the concept of full employment which, my understanding, was 6 percent.

So, I guess, let us start with that. It is almost like going back to Econ 101. And I can't think of a better professor than you to help the committee understand what changes, if any, have taken place over the last few years to perhaps change that equation.

Mr. GREENSPAN. Mr. Chairman, you are raising one of the most important questions which bedevil economists in our endeavor to get a sense of where the economy is going and what it is likely to look like, say, 10 years hence.

What we do know is that the change in the structure that evolved through the 1990s did bring the effective unemployment rate down. And indeed you may recall that we reached the 4 percent level and slightly less at essentially a low inflation rate, so that there was no evidence at that particular point that as the unemployment rate fell, we were raising inflationary pressures of the type that in earlier years we would almost have certainly seen.

Obviously, the changes in technology which have created a major improvement in productivity growth have been key factors here. And as we have observed in recent years, despite the weakness in economic activity, productivity has grown at an extraordinary pace. We must conclude from that, there have been some underlying shifts in the long-term structure of the American economy; and in my judgment, while we may not know where the unemployment rate, which is consistent with stable inflation—actually, I should say—stable prices, we don't know where it is, but it is clearly, from what we can judge, well under 6 percent.

And I would not rule out the possibility that it is close down to the 4 percent level, and I would merely suggest that so far as policy is concerned, we don't hold a fixed view, but as policy evolves, try to get judgments as to what actually is happening in the economy to make judgments as to how far down unemployment can go and stay there.

The CHAIRMAN. So essentially you are saying that 6 percent is no longer the benchmark that we would consider full employment that we relied on for, what, 50 years?

Mr. GREENSPAN. Well, it varied over time. Remember, in the early part of the post-World War II period, the general view was that, indeed, 4 percent was the unemployment rate which was consistent with price stability. It then altered very significantly during the 1970s and the 1980s, and it has since come probably almost all the way back down to where it was in the early part of the post-World War II period.

My own personal impression is that we have created a degree of flexibility in our economy which will enable us to have a functioning economy at unemployment rates lower than we had previously perceived in the last quarter century.

The CHAIRMAN. Is it true that the tech bubble in the late 1990s coincided with the unemployment rate going as low as 3.9 percent?

Mr. GREENSPAN. It did. But I wouldn't necessarily relate the two.

The CHAIRMAN. You would not relate the two?

Mr. GREENSPAN. Well, certainly the labor expansion and asset prices were a factor in economic activity. But if the structure of the labor market had been exceptionally rigid at the time, we would have found that prices and wages would have begun to move, as demand and supply pressures would have been out of balance. And so while, true, they are related in time, I am not sure I would relate them conceptually.

The CHAIRMAN. Thank you. My time has expired.

The gentleman from Massachusetts.

Mr. FRANK. Mr. Chairman, just to begin on that question. One of the reasons we were able, I think, to get to that quite healthy level, both socially and economically, was your willingness to challenge other people who believe that somehow automatically if we got that lower, the unemployment rate, it was going to be inflationary. And I continue to think that was one of the great services you performed by challenging what was then perceived wisdom in a lot of places, that we simply couldn't get below—remember, they had this concept of denial, when it seemed to me to be a lagging indicator—whenever unemployment dropped, it dropped. But fortunately you were not fraught by that, and your willingness to accommodate that drop was very helpful.

One very specific question, because I was struck again by your comments on the negative consequences of the deficit, the inescapable negative consequences of the deficit: Have you ever discussed deficits with Vice President Cheney?

Mr. GREENSPAN. The reason I hesitate, essentially—

Mr. FRANK. I know why you hesitate; you don't want to answer. That is stipulated.

Mr. GREENSPAN. Well, I just want to say that the reason for my hesitation is that I don't discuss—

Mr. FRANK. Okay. Fortunately, Paul O'Neill does, so we will go elsewhere to get that information.

On the question of unemployment, we share your hope that we will be able to get it down, but clearly we haven't yet. And here is the problem. I read your December speech, and, yes, the flexibility helps in the macroeconomic sense. You acknowledge that the process of adjustment causes some pain to some people, that overall the country benefits, but it does mean people get thrown out of work.

What troubles me is, I think you are not sufficiently attendant to the importance—both, I think, socially, but even economically—of alleviating some of that distress.

In that December speech about flexibility, you did cite one—only, really, one amelioration, and that was to retrain people through the community colleges. I appreciate that, but you know, the outsourcing now is taking place in many of the jobs that we used to retrain people for. I mean, if you go back to what we were retraining people for 10 years ago, some of those jobs are being outsourced. I don't think we can stop the economy, but it is going to stop if we don't do a better job of alleviating this.

As you know, the people who are losing their jobs may not be the ones who get the new jobs. There is a particular problem, and that is that many of the jobs being lost carried with them some reasonable degree of health benefits. And one of the terrible social problems in this country—and again, all these social problems have an economic kick back—the percentage of full-time employed people who get health benefits through their employment is dropping, and new jobs do not have the health benefits, partly because of different structures, partly because of the weakness of labor unions which has been a conscious policy as well as an economic factor, probably because when people start from scratch they figure they don't have to do it.

What—and I have to say also, Mr. Chairman, I think you exacerbate it one other way. Your comments on the deficit and its dangers are very strong. Not here, but elsewhere you have advocated that the great bulk of deficit reduction comes through spending reductions, not through any reincreasing in tax rates at any level. And we are not now talking obviously about tax reduction that was short-term stimulative; we are talking about longer questions in the economy.

I have to tell you that if we were to follow the prescription that I think you have made, that all—almost all of the adjustment—fairly substantial adjustment to get rid of these huge deficits, if it all comes on the spending side, our ability to ameliorate the social distress, that you acknowledge is the inevitable consequence of economic adjustment, will dwindle. And if that happens, you are going to continue to see resistance.

Now, you do tell people in your speeches, don't be protectionists. But as I have told you before, preaching Schumpeter. His theory of creative destruction buys you less in terms of a tolerance on the part of the people who are the short-term victims than you might ask, and I would really urge you—and I will hope you have something to say about it now—to join us in trying to do a better job.

I don't think we can, as a country, stop transitions, but if we don't do a better job of managing the social costs of these transitions to real people in large numbers, they are going to slow down the transitions and, in some cases, stop them. And we can't do that if we adjust all of this deficit by spending reductions and none of it by looking at the revenue side.

Mr. GREENSPAN. What I said, Congressman, and I will say again is that the longer-term problem is on the expenditure side, and that is a fact; and in a sense that you can by looking at the data, that we have very considerable difficulty in meeting the long-term projections for the commitments we have made without a significant increase in tax rates.

Mr. FRANK. Is it a fact that we have to reduce, abolish the estate tax altogether? That is not a fact; that is a value judgment.

Mr. GREENSPAN. No. I am referring to the numbers. If you look at the numbers, what the numbers tell you—and this is CBO, OMB, and in fact virtually every major private analyst who looks at it—we have a very serious problem in the future.

The point that I think we have to recognize is the fact that we don't know the extent to which tax increases curtail economic activity and, therefore, the revenue base. We do know that it is a risk, and therefore, in my judgment, we ought to be looking at getting as much as we can in the longer run in the way of expenditure restraint before we look at the issue of filling the gap on the tax side in order to get a viable fiscal policy.

I am talking about process.

The CHAIRMAN. The gentleman's time has expired.

The gentleman from California, Mr. Royce.

Mr. ROYCE. Thank you, Mr. Chairman.

Chairman Greenspan, welcome. One of the questions I wanted to ask you was about the condition today where the Asian central banks, particularly China and Japan, are buying U.S. Treasuries in record numbers, and they are doing that to keep their currency

from rising against the dollar. And my question is, if the dollar reaches some equilibrium and the Asian central banks stop this intervention, could their absence from the Treasury market cause interest rates to rise unexpectedly as a result of that? And is the Fed concerned about that possibility?

Mr. GREENSPAN. It is generally well-known in the marketplace that the maturity of those instruments which have been accumulated are relatively short-term, as indeed our overall outstanding debt is.

As a consequence, to take your question just even a step further and say what would happen if the holders of U.S. Treasury instruments began to sell them, would that put particular disruption on the price structure in the markets that occur here? And the answer is, it is unlikely. And the reason it is unlikely is, first, that even though there are very significant holdings of U.S. Treasury instruments in official foreign accounts, they are still a relatively small proportion of the aggregate competing securities, including private securities, which these markets integrate with.

It is also important that because the maturities are short, when you sell them, you don't significantly alter the price because, obviously, the price of a very short-term instrument can't fluctuate much so long as the maturity at par is a very short distance away.

So I think that the concerns that have been expressed about serious problems in our financial markets as a consequence of an ending of intervention of that sort are misplaced. I don't deny that there will be adjustments; there always are when any large block of securities moves back and forth. But it is not something which I would consider to be of major import in the financial markets.

Mr. ROYCE. I appreciate that answer.

Another question I was going to pose to you is, you said this morning that a strengthening in capital spending over this last year contributed to the acceleration of real output. If the Congress were to suddenly repeal the dividend tax cut that we enacted, would not that have a negative effect on equity prices, especially on those stocks that pay a dividend? And as a result, could business investments suffer because of the resulting increase in the cost of capital to the private sector?

Mr. GREENSPAN. Congressman, you may remember a year ago there was considerable discussion about the interrelationship between cutting or removing a significant part of the double taxation of dividends and yields and, hence, equity prices. I don't think the evidence in retrospect is all that sharp.

I do believe that when you reduce the tax on dividends, over the long run you invariably get higher levels of stock prices. But I don't think that the evidence is sufficiently sharp at this stage to suggest that it has been a major issue. But certainly if indeed stock prices were to fall, if history is any guide, they do have an impact on capital investment largely because, one, the direct increase in the equity cost of capital, and secondly, because of the capital values in a system impacting on what capital investment is.

Obviously, if you have, say, a residential building or, I should say, an apartment building or an office building which has a market value which is significantly greater than the cost that would be required to build it, you will be very much inclined to build apart-

ment buildings or office building. If, however, the value in the market goes down, you will be less so inclined.

Mr. ROYCE. Thank you.

My last question was to the issue that is—as far as I remember, as this process of forecasting interest rates has gone on, it has been focused on unemployment, productivity, the Consumer Price Index; and the last element of that that is always talked about is consumer confidence.

I would like to know how asset prices play into the monetary policy calculations. I would like to know how much emphasis these days does the Fed play on asset price levels of things like equities and credit spreads, home prices, commodities, the yield curve. When you are considering adjustments to policy, is that part of the prescription?

Mr. GREENSPAN. Well, Congressman, remember that our central focus is on the overall economy. I mean, our mandate is to create maximum sustainable growth in the context of price stability. And it is clear, all of the variables you just outlined have significant impacts on the pattern of both product prices and on economic output and employment. And to that extent, obviously, we watch them, we look at them, we evaluate them, and we try to integrate their effects into an overall view of the way the economy is functioning.

But as far as policy is concerned, our ultimate objective is on how the economy is functioning overall. And we do not endeavor in any way to apply monetary policy towards altering any of the individual variables that you outlined.

Mr. ROYCE. I see. Thank you, Chairman Greenspan.

The CHAIRMAN. The gentleman's time has expired.

The gentleman from Pennsylvania, Mr. Kanjorski.

Mr. KANJORSKI. Thank you, Mr. Chairman.

Dr. Greenspan, listening to the beginning of your presentation, I heard a great deal of optimism. And then the rest of your speech, as indicated, a great deal of mines that exist that we could step on in a very short period of time could be very disruptive of the economy.

But I think, going back to something that Mr. Frank first mentioned and you just referred to in your response to the last question, your position is to study and support a strong economy; and that is very good in practice, but it is what part of the American population experiences that very strong economy? And where I would like to direct our attention today is to several questions.

The President on three prior occasions has asked the Congress to adopt a policy of tax reduction, which it followed; and in every one of those presentations the President indicated to the American people and their representatives in Congress that it would cause substantial job increase. In one instance, they indicated the creation of 1,200,000 new jobs.

This creation of jobs has not occurred to date. And to date, we have 42 consecutive months of loss of manufacturing jobs in the country. So I guess my first question to you, can you or do you support the projection presently made by this President that, with making permanent the tax cuts that were previously enacted, they will create over the next year 2.6 million jobs; or is that a wish and a hope that cannot be realized?

And two, if we are going to have a good economy, but it is unequal as its benefits are distributed around this country, what are we to say to the citizens of Michigan, Ohio, Pennsylvania, New York, that have had substantial loss of manufacturing jobs? And from my observation, I see nothing on the horizon to see a replacement of those jobs or a growth in the manufacturing field.

Could you try and respond to that?

Mr. GREENSPAN. Certainly.

The major problem in forecasting jobs is essentially forecasting what productivity growth will be. I believe why the administration's forecast in the past fell short, as indeed most private economists' forecasts fell short, is that none of us perceived how large the increase in output per hour or productivity was going to be; and we still, in retrospect, do not fully understand why the extent of the efficiencies that have occurred has been as large as it has.

My own expectation is that the rate of productivity advance, which has been 5 percent-plus over the recent past, is going to slow down significantly. And it is just a matter of arithmetic that if overall growth in demand stays essentially where it is, you will begin to create significant job growth.

Is the administration's forecast, the current one, feasible? If productivity growth slows down to a more historic level, it is probably feasible. But we have not as yet seen any evidence that that is indeed the case. In other words, we are still seeing very little evidence of new job hiring.

Mr. KANJORSKI. Well, then let me interrupt a second. I mean, it is a simple question, it seems to me.

Over the next 12 months, do you see a significant change from productivity that is going to fall to historic levels and be an increase in jobs? Or is that fantasyland?

Mr. GREENSPAN. No, I don't think it is fantasyland. I think it is probably the most likely projection. Indeed, I think that—as I indicated in my prepared remarks—that goodly parts of the extraordinary rise in productivity are looked at in an obverse sense.

The failure of net job creation to occur with the growth and output is largely a consequence of a substantial amount of inefficiencies that invariably build up during a boom period, which occurred in the previous 1995 to 2000 period. And as a consequence of that, the possibilities for significant rates of return in either capital investment or just management shuffling has induced a very major improvement in the way business is done.

My impression is, however, that that backlog of unexploited inefficiencies is probably running out. And if so, we will fall back to a more normal level of productivity growth. And if that happens, then a number not terribly different from what the administration is forecasting is a likely one.

It, however, depends on the productivity forecast. And I must say to you that our ability to forecast that has not been sterling.

The CHAIRMAN. The gentleman's time has expired.

The gentleman from Louisiana, Mr. Baker.

Mr. BAKER. Thank you, Mr. Chairman.

Welcome, Chairman Greenspan. I wish to turn to a subject you and I have had previous discussions about and, first, simply to make a request. Given the inadequacy of current financial report-

ing, apparently, at least at one of the GSEs, and the pending re-statement issues, I have concerns that our ability to accurately assess financial condition may be significantly impaired.

To that end, one indicator that your agency is the repository of the information could be quite useful and helpful to those on the committee with interest in this matter, would be a report by you, if appropriate, on the failure of either enterprise to meet the traditional 4 o'clock settlement obligations in their P&E accounts—the amounts, the durations—and perhaps contrast that with a similar frequency of financial institutions of similar financial scale to give us some idea about whether these are aberrant behaviors or whether it is consistent with a broader financial market.

And I don't expect a comment today, I just wanted to get a request on the record.

Secondly, time permitting, for you to express your opinion with regard to a regulator having the authority to adjust minimum capital unilaterally, based on concerns of safety and soundness, and whether the authority to adjust minimum capital is a significant regulatory tool which other financial regulators utilize.

But most importantly, for you to respond to statements made by others pursuant to the release of a report in December by the Fed which examined the value of the implied subsidy, the potential cost to taxpayers of the GSEs in utilization of that subsidy, the response of which by one GSE to that report was, "It is the work of only one uninformed employee and does not represent the views of anyone else."

Mr. BAKER. I wanted to give you the opportunity to express either your personal or board opinion concerning the efficacy of that report. And do you believe that based on the findings of that report, as I have read it, that the employed subsidy does not provide significant benefits to the mortgage market while costing taxpayers billions?

Mr. GREENSPAN. Well, Congressman, with respect to your second question, I would broaden it and say that any regulator, either a banking or a financial institution, cannot function appropriately without the capability of adjusting the capital of those entities which are supervised. If you have a fixed amount of capital with which to deal, it is very readily possible that you will run into a regulatory problem which is not solvable, so I think that without the ability of a regulator to have essentially full capabilities, or a very wide range of capabilities, to adjust capital of the entities which are being regulated, I would say that that regulation is half functioning. It is basically tying one or one and a half hands behind your back. And I would strongly recommend to the Congress that whatever regulator structure is constructed, that that regulator have control of the capability of capital because without it, regulation, in my judgment, will be deficient.

With respect to the second question, I read the report of Wayne Passmore. I read it twice. I think it is an exceptionally good analytical report. I haven't checked the econometric details of his data input or his calculation of T values or the like, but the structure and the way he came at the particular analysis, I thought, was first rate. And if others think it can be improved upon, and indeed we are asking for inputs to improve upon it, we would like to hear

any criticisms, any data which contradicted it, or in fact anything which would improve the evaluation. We have no vested interest in the final conclusion of the report. We do have a vested interest that it be accurate.

Mr. BAKER. Mr. Chairman, I would offer that in the event that you choose to do so, I am very anxious to hear the criticism validity, and should it be advisable at some future time to have a little get-together and talk about it, I would be more than willing to facilitate such a meeting. And I thank you for your courtesy.

The CHAIRMAN. The gentleman's time has expired. The gentlelady from California, Ms Waters.

Ms. WATERS. Thank you very much, Mr. Chairman. Mr. Greenspan, we welcome you. We always are delighted to have you here and I bring you greetings from my district. My constituents still have fond memories of your visit there and we welcome you back. But they told me to ask you—

Mr. GREENSPAN. I remember it fondly as well, I must say to you.

Ms. WATERS. Thank you. But they did tell me to talk with you about jobs today. You are going to hear, particularly on this side of the aisle, many questions about jobs, job creation and outsourcing. As we welcome you here, we seek your wise counsel and advice about how we as public policymakers can reconcile the dilemma that you describe in your statement as the economy having made impressive gains in output and real incomes and only limited progress in creating jobs.

Mr. Chairman, as you know, having a job is like motherhood and apple pie in America. And when we look at what is happening to jobs, I see in my own State job loss numbers from the Bureau of Labor Statistics that show that my State of California has lost 284,900 nonfarm payroll jobs since January 2001, including 8,400 such jobs in December. As of December 2003, there were 1,125,890 persons in California who were unemployed, 329,875 more than in January 2001. There are a lot of other numbers that I could give you, but I want you to know as we look at this national job picture, the job picture is even worse for minorities. The national African American unemployment rate is 10.5 percent and the Hispanic employment rate is now 7.3 percent.

Now, to add insult to injury, Mr. Chairman, we have this outsourcing. We started to talk about this 15, almost 20 years ago. When I was in the State legislature one of my biggest pieces of legislation had to do with plant closure, and we warned that the loss of manufacturing jobs and the exportation of jobs to third world countries was going to create this kind of job picture. And we were told by economists, don't worry, there will be different kinds of jobs. And yet that has not happened.

Mr. Chairman, what advice do you give us? Do you believe that this administration can make the Bush tax cuts permanent, continue to spend and create this huge deficit, not unveil to the American public what the war in Iraq and Iran is costing us—it wasn't shown in the budget—and somehow create jobs and turn this picture around? What is your advice? And do you believe that when we look at the President's expenditures and this huge deficit that we can have new spending such as the space program that he described in the budget, the creating of the space station on the moon

and going to Mars? And Mr. Chairman, what is this business about training for what jobs in the community colleges? And shouldn't we be attaching to the tax cuts and evaluating whether or not that money is seeing its way back into the economy and doing job creation? How can we solve this dilemma? What advice would you give this administration and us?

Mr. GREENSPAN. Well, first of all, the major problem with jobs is not economic growth. It is not demand. It is not the structure of the elements which are involved in taxes or anything which impacts on the gross domestic product. If that were the case, and we were in a period of historically low productivity growth, our job creation numbers would be huge at this point. So what is involved here is this very difficult problem that we have got. On the one hand we obviously look with great favor on the efficiencies that are occurring because at the end of the day that will elevate standards of living of the American people. On the other hand, it is very clearly creating a significant shortfall in new hires. Now, unless I am mistaken, my view is that this pattern is about to change. I don't know when it is going to change. I just find it highly difficult to imagine that we can continue to advance efficiencies as quickly as we are doing. But I will say this, that it is only a slowdown in productivity or an incredible and unexpected rise in economic growth from an already high level that will create jobs. And I don't think that the question really at this point is involved in the budget or fiscal policy, although, for reasons I try to outline in my prepared remarks, it is a very critical issue down the road, so to speak.

The CHAIRMAN. The gentlelady's time has expired. Gentlelady from New York, Ms. Kelly.

Mrs. KELLY. Thank you, Mr. Chairman. Your office has worked with my—with the oversight subcommittee on issues that are related to critical infrastructure and the implementation of the anti-money laundering legislation. This committee drafted title III of the USA PATRIOT Act. Part of what that did was aim at monitoring the flow of illicit money. Since the gentlelady raised the issue of what is going on with regard to that aspect of things, I would like to get some information from you. These provisions expire in that—in the PATRIOT Act in 2005. I would like to know what your thoughts are on the use of title III, including the requirement that foreign countries and financial institutions share cross-border information in order to do business with the United States.

Mr. GREENSPAN. Congresswoman, I am aware of what obviously we are doing and I am obviously aware of what others are doing. But I am unclear in my own mind of where it is classified and where it is not classified. So I am in a difficulty answering your question. What I may like to do, if you don't mind, is answer you in written form with respect to that issue and try to give it some context. I will try to do that as soon as I can if I may.

Mrs. KELLY. Mr. Chairman, I appreciate your sensitivity and I am certainly delighted. Any venue at all that we could have a dialogue about that I would appreciate. One of the things, also, there have been some concerns raised about the potential impact about a patchwork of securities regulation which includes efforts by the

Federal Government and the State governments in a way to set and regulate prices in the market. Some of the people have said that the more cops on the beat the better. But then I am wondering if it isn't appropriate to say that the more cops that are on the beat working in coordination with each other is better.

Do you think that investors and the American people benefit from coordination between the State and Federal regulators to maximize the enforcement and ensure the highest level of expertise with regards to the markets? Also, through—just a second question there. Maximizing returns that go directly back to the investors is something we have talked about. I want to know if your opinion has changed on that also. So I have asked you basically two questions.

Mr. GREENSPAN. Are you referring mainly to mutual funds when you are posing your question?

Mrs. KELLY. Well, let's just frame it—it was more a general question. But if you can frame it within mutual funds it is fine with me.

Mr. GREENSPAN. Well, the thing we have to be aware of is that a market based capitalist system cannot function if there is a great deal of criminality involved or violence. When we talk about a rule of law, one of the rules is that thou shalt not steal. And some of what has been involved in with respect to the mutual fund industry, if the charges turn out in fact to be true, which some of them presumably are, is basically one group of people stealing from another. That is called a felony. And in my judgment, we have to be very assiduous in maintaining to eliminate that from the system because otherwise it will be difficult to get our system to function.

Having said that, it is also important to recognize that it is very easy in the process of enforcing the law against criminality to inadvertently involve ourselves in functions which are not criminal and which restrict market competition and, in so doing, will undermine the efficacy of the institutions that we are concerned about, institutions which are very important to the functioning of the American financial system. And in my judgment, we have to be aware of how important these institutions are, not only to individual investors, which they are, but also to the liquidity and the functioning of the aggregate financial system and their importance in enabling the type of flexibility which I have said so much about recently as being one of the critical factors in why, despite all of the shocks that we have seen to this economy starting from the stock market crash, all the way to 9/11 and the Afghan and Iraqi wars, we have had very little in the way of economic contraction, and I attribute that in large measure to the flexibility that has emerged in our financial system, amongst other places. And I would be very concerned were we in our endeavor to root out very properly criminality from our institutions know where the boundary line was.

The CHAIRMAN. The gentlelady's time has expired. The gentleman from Vermont.

Mr. SANDERS. Thank you, Mr. Chairman. Mr. Greenspan, nice to see you again. I always enjoy your presentations, as you know, and I never cease to be astounded about how your observations about our economy are so far removed from the reality that I see every day in my State, middle class people and what I see all over the

country. It is like we live in two different worlds. You talk about optimism. I see in my State and around this country that the middle class is shrinking, that ordinary people are working longer hours for lower wages. I see that since 2001, three million more Americans have become poor. I see more and more Americans without any health insurance. I see retirees now losing the benefits that corporate America promised to them. I see older workers worried about the pensions that they were promised but which they may never get. And that is what I see. That is the bad news.

But the good news, which I haven't talked about enough, is that many of your friends, the wealthiest people in this country are doing phenomenally well. While over the last 27 years the real income of the bottom 90 percent of American taxpayers actually fell by 7 percent, the income of the top 1 percent rose by 148 percent and the income of the richest one-hundredth of 1 percent, the really good friends of yours, they rose by 599 percent. So maybe that is the difference in perception.

Some of us go out and we talk to middle class people and working people. Now, Mr. Greenspan, over the last 3 years the U.S. has lost almost three million good paying manufacturing jobs, representing 16 percent of our total factory work force. Manufacturing employment has gone down 43 consecutive months, which hasn't happened since the Great Depression. Due to our disastrous trade policies, which you advocate for very, very strongly, American companies have shipped millions of decent paying jobs overseas to countries like China, where if workers try to form a union they get fired. If they try to protect the environment they may go to jail. People like the CEO of General Electric, Jeffrey Immelt, and many others stand up proudly to advocate how they are going to shut down plants in America and move to China. And while decent paying manufacturing jobs in this country decline, the largest employer in the United States is now Wal-Mart, who pays people—which pays people poverty wages, fights unions ruthlessly and provides miserable benefits.

A new study came out, as you may be aware of, that indicated that the new jobs being created in this country, primarily service jobs, Wal-Mart type jobs, pay 21 percent less than the old jobs that we are losing. Not only are we losing manufacturing jobs, we are now losing white collar information technology jobs because they are going to India.

Now, last year what I thought was an incredible statement you stated, and let me quote it. Quote, is it important for an economy to have manufacturing? There is a big dispute on this issue. If there is no concern about access to foreign producers of manufactured goods, then I think you can argue it does not really matter whether or not you produce them or not. End of quote. Mr. Alan Greenspan. In other words, according to you, it doesn't matter whether we get our goods purchased in China, from people making 20 cents an hour, or they are produced in the United States from people making \$20,000—\$20 an hour.

Now interestingly, and this is my question, the Bush administration apparently agrees with you. According to the Seattle Times, the Bush administration believes, and I quote, the movement of

American factory jobs and white collar work to other countries is part of a positive transformation that will enrich the U.S. economy.

So my question is, do you agree with the Bush administration that it doesn't matter if we lose good paying manufacturing and information technology jobs and they are replaced by low wage Wal-Mart jobs?

Mr. GREENSPAN. Congressman, let me actually agree with some of your figures, but give you a different perspective on what creates them. First of all, if all of the jobs being lost in the United States over the years and this goes back to the problems we used to have where we were losing jobs to low wage Japan, then we were losing jobs to low wage Mexico, then to low wage China, now the Mexicans are complaining that they are losing jobs to low wage China. Through all of this, the real wage of the average American has been rising and rising at a reasonably strong clip. The question that you I think properly raise is the income distribution question because it is the case that people at the lower end of the skills spectrum have had very considerable difficulty in raising their real wages where those at the upper end have shown significant so-called skill premiums. And what this turns out to be regrettably is a problem of a mismatch between a growing more sophisticated conceptual capital stock, meaning the means by which we produce goods and services in this country is ever increasingly more ideas and skills and less physical input and manual labor. That has been the long—

Mr. SANDERS. I don't mean to interrupt you.

The CHAIRMAN. The time of the gentleman has expired.

Mr. SANDERS. You didn't answer my question.

The CHAIRMAN. The gentleman's time has expired. The gentleman from the first State, Governor Castle.

Mr. SANDERS. Can he answer the questions?

Mr. GREENSPAN. I can't answer the question without answering the question and I am trying do that.

The CHAIRMAN. Gentleman from Delaware.

Mr. CASTLE. Mr. Chairman.

Mr. GREENSPAN. The point that I am trying to suggest to you, Congressman, is that the gross domestic product in this country is becoming increasingly more conceptual as the years go on over the generations and that it is important for our work force of necessity to match the skills that are required to produce the goods and services we do. Regrettably, we need to do more as far as education is concerned to move our skills level in line with, the growth in the conceptual underlying technology of what it is we produce. We have not been able—please.

The CHAIRMAN. The gentleman's time has once again expired. The gentleman from Delaware.

Mr. GREENSPAN. May I just make one final sentence, please?

The CHAIRMAN. Go ahead.

Mr. GREENSPAN. The point at issue here is that we are ending up with an inadequate ability to move skills up sufficiently quickly. And this, as you point out, has created a problem of excess supply versus demand amongst our lowest skills and the reverse in the top. And that is something we have to address. And I happen to agree with Congressman Frank, that it is very important in this

country not only to have an equitable society, but to have it perceived as being equitable because no democratic system can function unless the people believe it is equitable. And I think that it is crucially important for us to reduce the income inequality in this country and I think the way that one has to do that is through education. And I must say to you the community colleges in this country have been in the forefront of a major change in the quality of what we are doing with respect to reestablishing skills.

So I agree with your numbers. I just disagree with the conclusion you have come to.

The CHAIRMAN. The gentleman from the first State.

Mr. CASTLE. I thank you, Mr. Chairman. I want to sort of build on what you were just talking about, Mr. Chairman. And you talked about income inequality and you brought in education. And I serve as the head of an education subcommittee and I have been involved with No Child Left Behind and I also serve on the Higher Education Subcommittee as well. And I would like your views on what role that you see for our country's educational system and preparing and supplying properly trained workers for our economic society and our society at large. And like everybody else I am concerned about the job drain, et cetera. And I happen to believe that some of this is educationally related to a great degree. You mentioned junior colleges, but there is also the whole function of the quality I think that we need in K through 12th grade as well as opportunities to go to all colleges, et cetera, in this country. And I think it is a more significant part of our economic broad picture than perhaps meets the eye and I would be interested in your views on that, sir.

Mr. GREENSPAN. Well, Congressman, I find discouraging the fact that the recent evaluations of the ranking of our students internationally in math and science, find the American students sort of average, maybe slightly better than average in the fourth grade and by the time they get to the eighth and the 12th grade we have deteriorated significantly. And what this suggests to me is that we are falling short in getting an adequate number of people through our elementary and secondary schools into colleges, and thereby increasing the supply of skilled workers and effectively bringing down the so-called skill premium, which would be a major factor in reducing income inequality in this country. Not only is the issue one of moving students much more rapidly from fourth grade through high school and into colleges, and its impact obviously on higher skills, but in doing that, you also reduce the supply in a number of the lower skills which will raise their wages and have an effect of rebalancing the structure of wage changes in the United States, so that the skill differentials are significantly different from where they are at this particular stage. And that, to me, says that we have to find ways to create a curriculum which enables us to compete with a significant part of the rest of the world, and a lot of the rest of the world to which I am referring to is the so-called developing world. And I don't know enough about the specifics of curricula and how one would improve that, but I do know what the effect is. And I do know that it is obviously possible, because they are doing it everywhere else in the world and we are not. And if we want to maintain an economy and a society which

has been at the cutting edge of technology, with the highest real incomes of any major country, we have to enhance the capability and the skills of people coming out of our schools. You cannot have a highly complex capital structure without skilled people to essentially staff it. I think immigration is obviously one thing that is helping in part. It is filling in a lot of the slots where skills are required. But we shouldn't be needing to do that. We should be doing it with our own students and enhancing their capabilities in a manner which would enable our increasingly complex capital stock to function and maintain these very long term improvements in productivity, which even though I expect them to slow down from the recent pace, nonetheless, even at half of where they have recently been, it would be a major advance over what we experienced in the period of say the 1970s and the 1980s.

Mr. CASTLE. Well, I agree with you, Mr. Chairman, and my time is going to expire here and I think it is very important that the whole country understands that tie between education, our economy and the significance of it individually and individuals and families as well as the overall economy. And while I won't have time to ask the question, I would just like to credit your comments in your statement on the deficit. There is a lot of wisdom there in terms of what we have to do. I am one of those who believes that we have to put everything on the table all the way from looking at the tax cuts to homeland security and defense and as well as other discretionary mandatory spending, and make some hard and fast decisions. And I think you have underlined that very well in your statement and I hope that all of us can learn from it as well. And I did note, by the way, that the stock market is up a little bit which always makes me feel good when you are testifying, and I yield back, Mr. Chairman.

The CHAIRMAN. The gentleman's time has expired. The gentlelady from New York.

Mrs. MALONEY. Thank you, Mr. Chairman. And Dr. Greenspan, we all have a great deal of respect for your knowledge of the economy, and that is why I have to ask why is the economy so bad for so many of my constituents? Even though the economic indicators look good, the GDP growth is up, there has been improvement in many areas, but still there are no jobs. And I represent a highly educated and skilled constituency. And still, highly educated, skilled people cannot find jobs. And this is very, very troubling. I know that you have lowered interest rates 13 times since President Bush was elected and interest rates are at a historic low. But some observers believe that you are keeping a low Federal fund rate because of the stagnant job situation. The economy needs to create 125,000 to 150,000 jobs a month just to keep up with the growing labor force, and last month we created only 112,000 jobs. So my question is, how heavily is the job situation and job stagnation affecting the Federal Reserve interest rate policy? I know that there are many different variables. I am not talking about the other variables. But what we are seeing is all the other variables are going up, yet the jobs are continuing to fall basically. We can't even get up to where we began when President Bush took office. So my question is, is it the job stagnation that is keeping this historic low rate?

Mr. GREENSPAN. No. It is basically our overall view of what the balance of forces is in the economy, and what we have tried to indicate is that given our evaluation of what the economic outlook is, what we view as the outlook for inflation, for growth, for productivity and jobs, all in combination, has placed us at a point where we believe the most appropriate rate is 1 percent for the Federal funds rate. And I don't want to get involved into any more of the particular details, but I would scarcely say, as I indicated to one of your colleagues a moment ago, that any particular variable in our economy is driving monetary policy. Obviously, for reasons I mentioned before with respect to the question of concerns about people who are not only having difficulty finding jobs because the hiring rate is so low, but there is also the problem that no one has mentioned which is a difficult issue, that when people get laid off and they do seek jobs, on average, for a while at least, their income rate goes down. And that is a factor which has been clearly over the years a significant issue, suppressing the overall growth in real incomes in the society. So what we have got is a highly mobile population, and it is one in which the job turnover numbers are awesome. We, in fact, hire a million people a week in this country, and more or less a million people lose jobs or quit jobs during the week. So there is a huge churning, but that means there is a very substantial number of people who are on the wrong side of that churning, for example, I mean currently two million have been looking for jobs for over a year and can't find them. So I mean it may be a relatively small part of the population, but it is still millions, and we are acutely aware of what these elements do to a society. So we may be Governors of the Federal Reserve but we are also citizens of this country.

Mrs. MALONEY. So given what you have said today in your testimony, and given the fact that you have accommodated this with a very low Federal funds rate, a historically low one, and is it safe to say that you disagree with the report that came out yesterday from the Bush administration's Economic Policy Advisers that next year we will create 2.6 million jobs? That is what this report says. That is what the report came out.

Mr. Greenspan. I haven't read the specific—

Mrs. MALONEY. Well, it says we are going to create 2.6 million jobs.

Mr. GREENSPAN. I haven't read the specific details of their forecast. My impression is that they have a significant decline in the rate of productivity advance from where it has been recently, and if you get—

Mrs. MALONEY. Do you agree or disagree?

The CHAIRMAN. The gentlelady's time has expired.

Mr. GREENSPAN. I haven't read it. I said to one of your colleagues earlier it is a credible forecast if the rate of productivity slows down to a more historical average.

The CHAIRMAN. The gentlelady's time has expired. The gentleman from Texas, Mr. Paul.

Mr. PAUL. Thank you, Mr. Chairman. Welcome, Chairman Greenspan. I certainly was pleased that you brought up the subject of deficits, because deficits obviously do cause a problem and you mention that deficits may eventually cause interest rates to go up.

But I also would like to suggest that deficits alone are not the problem, because whether you borrow the money or tax the money out of the economy, deficits still put pressure on the capital market. So deficits alone are not the problem. It is big government. It is big spending and the amount we spend here that really, really counts. But you said the deficits could—future expectations of deficits could raise interest rates and I certainly would agree with that. But we also must remember that future expectations of the inflation rate and the future expectations of the value of the dollar also can raise interest rates. And those caused by monetary policy. And therefore, the pressure or the emphasis or the blame for high interest rates that will come can't be put on the deficit alone. It has to be put on those who manage monetary policy.

Also, you warned on page seven that the printing presses won't run indefinitely. You use the word "indefinitely," and that is good because if they do run this fast indefinitely, we all know what will and can happen. So that is good that eventually you will turn the printing presses off. But for now you said you can be patient, and that means we will just let the money flow and see what happens, which I think is a risky proposition.

But you mentioned the condition of protectionism. You are worried about protectionism, which I think is characteristic in all societies that destroy their currency, and especially when you have a fluctuating fiat currency. People yield to the temptations of protectionism. But once again, there are different ways of bringing about protectionism. There are the tariffs. But there is also the competitive devaluations and the exchange rate of the dollar, which is a reflex of monetary policy.

But my question is related a little bit to the wording of indefinitely and being patient because they are arbitrary. They are subjective. And in January your report, FOMC report omitted two words, two words that were subjective, and that was "considerable period." and I find very interesting, and also very alarming, the amount of clout, the amount of power that we as a nation and we as a committee have allowed to get into the hands of one or two individuals or a committee. From the time the market was up to the release of that report the stock market lost \$250 billion as a reflection of the concern about the dropping of two words. Frederick Hayek was fond of saying that the managed economy was in danger because it was based on a pretense of knowledge, that certain things the economic planners don't know and, for instance, he would agree with me that we don't know, you don't know, the Congress doesn't know what the overnight rates ought to be, yet we reject the marketplace. But it is part of the system. And I understand that. But doesn't it ever occur to you that maybe there is too much power in the hands of those who control monetary policy, the power to create the financial bubbles, the power to maybe bring the bubble about, the power to change the value of the stock market within minutes? That to me is just an ominous power and challenges the whole concept of freedom and liberty and sound money.

Mr. GREENSPAN. Congressman, as I have said to you before, the problem you are alluding to is the conversion of a commodity standard to fiat money. We have statutorily gone onto a fiat money standard, and as a consequence of that it is inevitable that the au-

thority, which is the producer of the money supply, will have inordinate power. And that is one of the reasons why I have indicated because of that, and because of the fact that we are unelected officials, it is mandatory that we be as transparent as we conceivably can, and remember that we are accountable to the electorate and to the Congress. And the power that we have is all granted by you. We don't have any capability whatsoever to do anything without the agreement or even the acquiescence of the Congress of the United States. We recognize that and one of the reasons I am here today is to endeavor to convey why we are doing what we are doing. And I will continue to do that, and I am sure that all of my colleagues are fully aware of the responsibility that the Congress has given us, and I trust that we adhere to the principles of the Constitution of the United States more so than one would ordinarily do.

The CHAIRMAN. The gentleman's time has expired.

Mr. PAUL. And I agree with you that the responsibility is here in Congress.

The CHAIRMAN. The gentleman's time has expired. The gentleman from North Carolina.

Mr. WATT. Thank you, Mr. Chairman. Chairman Greenspan, welcome once again. And I always try to take your macro approach which you have responsibility for and put it in my own context because while economics may be macro, politics is local, which is a little bit micro. And so I have been listening intently to what you have to say and trying to put it in the context of the North Carolina situation, and I want to read a little excerpt and then ask you a question or two. This excerpt from a report says in nine States that cover most regions of the country, and North Carolina is one of those States, the number of unemployed workers projected to exhaust their regular benefits between January and June 2004, without receiving any further assistance, is larger than the number for any previous January to June period on record. And then it says the most dramatic story is in North Carolina. The 61,600 unemployed workers who are expected to exhaust their regular benefits without being able to receive further aid is 50 percent higher than the next highest level on record.

Now, I am trying to apply what you have said to North Carolina, and I know you have got the whole 50 States to apply it to. But if I do so, a couple of things jump out at me. Number one, North Carolina is reputed to have among the best community college systems in the country. Number two, I am trying to figure out exactly how productivity, which is what you say is sustaining the failure to hire people, how that kind of plays out in North Carolina with all of the plant closings that we have had, because a closed plant can't either be productive or unproductive. I mean there is not going to be any jobs there.

So I guess my question is, number one, would extending unemployment benefits be stimulative to the economy, first of all? And number two, can you put in context the micro—macro analysis you have done and help me feel better about what is going on in North Carolina on the micro or local political level?

Mr. GREENSPAN. Congressman, I wouldn't put the issue of extending unemployment benefits in North Carolina or anywhere else

as an issue related to trying to stimulate the economy. The economy has got plenty of stimulus. If you are going to move on extending unemployment benefits, it should not be for that reason. It should be for the reason of trying to help people, 61,000, who presumably need it, although I suggest to you that unless I am mistaken, for the economy as a whole we are going to find that those exhaustees, so to speak, coming off 26 weeks of unemployment insurance will be heading down in numbers really quite significantly. But I think the important question is what does one do in a world in which a number of the industries, which are running into trouble in this highly dynamic economy with major changes in technology, what does that type of economy do? I remember working with a number of the textile plants in North Carolina. I did a lot of work for Burlington and a number of other operations in the area, and 20, 30 years ago, these were really extraordinarily first class operations. And over the years, as has happened in so many industries, competition created very difficult conditions for them, and they gradually shrunk in size and many of them have gone out of business, as you know better than I.

What I think is crucially important to do under those conditions is to find ways in which to recognize that the level of real income of a geographical area depends to a very substantial extent on the degree of skill of the population, not the particular jobs that they happen to be in. Over the years people have held very different jobs through North Carolina, and real income has risen materially. What is crucial is to find a way to be sure that new jobs, new ways of doing things can be done because as occurred in many areas of our country, we have seen big shifts, for example, from steel. Manufacture to health care in geographical regions in which, as steel income went down, real incomes went up because of very major facilities coming on in the health care industry. And there are innumerable examples like that. But it happens over time and while it is happening, it is very distressful to people. The trouble is that you cannot readily stop progress. You can try, but invariably you will fail. And the reason why I say it is very important for us to make certain that our school systems and, as you pointed out, the excellent community colleges in North Carolina, it is important to find new ways in which the inherent skills of a population can be converted into high real incomes, wholly irrespective of what particular jobs or industries they are in.

The CHAIRMAN. The gentleman's time has expired.

Mr. GREENSPAN. It is not an easy issue, but I am not sure I know of a real alternative to that.

The CHAIRMAN. Gentleman from Illinois, Mr. Manzullo.

Mr. MANZULLO. Thank you, Mr. Chairman. Mr. Chairman, on Monday Dr. Gregory Mankiw, Chairman of the President's Council of Economic Advisers said shipping jobs to low cost countries is, quote, the latest manifestation of the gains from trade that economists have talked about, end of quote, for centuries. And he also stated in the report that he issued that Chinese exports to the United States, quote, are not a primary factor in the displacement of the American manufacturing workers, end of quote. As a Member of Congress whose unemployment in the largest city, Rockford, Illinois, which led the nation in unemployment at 25 percent in

1981 and whose unemployment now is still over 11 percent, not counting the four factories that have decided to close and whose numbers are not counted in the unemployment, two questions. First of all, do you agree with the statement and, second of all, his further statement was that new jobs will be created, and I would like to know, my constituents would like to know, what are the new jobs? When are they going to be created? What sectors are they involved in?

Mr. GREENSPAN. Congressman, first let me say first that I haven't read the article to which you are alluding at this moment nor have I seen other than the quotes in the press this morning concerning what Dr. Mankiw has said. Let me just say, first, that he is a first rate economist and I must say he is held in the highest esteem amongst his colleagues. I can't comment on specifically what he said with respect to outsourcing because I haven't read it. But with respect to China, I have said very much the same thing and for a very important reason. It has often been argued that the exchange rate in China is too low and that if it were raised it would create jobs in the United States. The implication there is that the other sources of low labor input, low labor cost jobs would not displace China as indeed China displaced a number of East Asian jobs. I think that there are very serious job problems and there are very serious problems specifically in your area of the United States and I think we are all acutely aware of the difficulties involved there. I would not, however, try to figure out a policy which would somehow restrict the exports from China.

Mr. MANZULLO. I am not talking about a policy. I am talking about the statement.

Mr. GREENSPAN. No, but his statement, as you have alluded to, is that China is not the problem of loss of jobs in the United States.

Mr. MANZULLO. I can give you the names of Gear Manufacturing, Barry Manufacturing, I can give you lists and lists and lists of American manufacturers, including thousands of unemployed people in my district who have lost their jobs specifically, specifically because those products are now being made in China.

Mr. GREENSPAN. No, no. I don't disagree that this is indeed happening. I am just merely saying that if China stopped exporting to the United States that others would take up the slack and I think in that regard you would find that it is not a Chinese issue. It is a basic issue of competition internationally.

Mr. MANZULLO. The January 30th edition of Wall Street Journal had an article where China is now outsourcing to North Korea and Vietnam because \$150 a month is too much to pay. But the reason I asked the question is I think it is extremely upsetting to my constituents and several Members of Congress when the President comes out with a tremendous package on manufacturing and then right behind his back, almost 180 degrees, the head of the Council of Economic Advisers says there is no problem with stuff coming in from China. That is not the case. We have got a serious problem going on, and I think we need to address that. But first, the chief, Council of Economic Advisers has to recognize that there is a problem.

Mr. GREENSPAN. Is there a question in that last—

Mr. MANZULLO. No, it was just a nice statement. But thank you for your input. I appreciate it.

The CHAIRMAN. The gentleman yields back? The gentleman from the evergreen State.

Mr. INSLEE. Thank you, Mr. Chairman. Doctor, we are glad you are here because we need your help restoring some measure of fiscal sanity to the United States Government. With the deficits that we are now running over 500 billion, you know, I had one constituent the other day that says, you know what you guys look like, you make Enron look like Mother Theresa ran the shop. And the unfortunate situation is that with this exploding deficit, we still have those here in this administration and in Congress who want to continue on this glidepath of continuing this course of adding debt to future generations and continuing to ignore the known fact that the baby boomers are coming and we are coming pretty soon. And in preparation of our discussion today, I thought it was useful to look at a little history and so I looked at a little history and if I can refer you to a chart over to your right, Doctor, this is a graph basically of our deficits starting in 1989. And to reference those who are looking at the graph, up is good, down is bad. When the graph is going down the deficits are increasing. And if you look at the history of this thing, in 1989 to 1992 the deficit was increasing and I don't mean to blame the first President Bush for that because he actually did some things to try to reduce the deficit at the end of his term. Then from 1992 to 2001 we saw us on a continuous and surprisingly continuous and reliable improvement of our fiscal condition up to surpluses up to the year 2000, 2001. And since that time we have not seen a general or gentle diminution of our fiscal process. We have seen a precipitous fall into deficits down where we are 521 billion in the hole at this time. And we are in a situation right now that some want to essentially continue the course of increasing spending on the one side and decreasing revenues on the other.

So I asked myself, well, maybe there is a reason for that. Maybe it is to create jobs. So if we can look at the next graph. We will look and see if these policies—what impact they have had on our job creation in this country. And what this is, is a graph of the job creation during respective presidents going back to Truman, 4.6 million increase. One point nine million for Eisenhower. Four hundred seven million for Nixon. Reagan, 5.3 million the first time, 9.3 million in the second. We get down to the last 3 years, and we see the first meaningful negative number of 3 million jobs lost net during this last term of office. So job creation has not been an excuse, if you will, for the creation of these enormous deficits.

So where do we go from here? Well, I need to ask your thoughts because what we have seen and you alluded to in your testimony is you have alluded to an increase in spending, both in defense and in discretionary domestic, during this current management of the U.S. Government. But we have also seen attempts and future attempts to reduce the revenues of the United States Government. And I just want to ask you a general question. Given the deficits that we have seen, given the fact that you and I both know this is a fantasy that we are going to cut them in half within 5 years, when we know that we haven't even included the cost of the Iraq

war or the Afghanistan war or the AMT or the trip to Mars, given that we both know that, does it make sense, is it irresponsible to continue on a course of greater spending and reduced Federal revenues and, if not irresponsible, is it inadvisable and, if not inadvisable, is it risky? And if not risky, should we have a yellow flag up, which I hope you will show to this country, to change these policies from increased spending and decreased Federal revenues?

Mr. GREENSPAN. Well, Congressman, I think that much of what you have said and much of the concern that you have expressed is actually stated in the President's most recent budget document. In short, I certainly know that the financial people within this administration are acutely aware of all of these issues and to my knowledge, the President is as well. So I have no reason to disbelieve that he is going to make every effort to in fact move in the direction which you are suggesting.

Mr. INSLEE. Well, let me suggest a reason that I am concerned about—if we can have the next chart.

The CHAIRMAN. The gentleman's time has expired. One more chart.

Mr. INSLEE. Would you allow me 30 seconds or not, Mr. Chair?

The CHAIRMAN. Of course.

Mr. INSLEE. Thank you very much.

The reason that I am concerned is the President has suggested new spending, namely a war in Iraq, which is not in his budget, number one. And number two, we have folks here who are suggesting increased reductions in Federal revenues by making tax cuts permanent for upper-income folks that will cost \$1.3 trillion. We have new tax proposals in this budget of about \$135 billion, and we have an increased debt service of over \$700 billion associated with the new debt my constituents are paying due to the debt created on this President's watch.

So I guess the question is, is there some reason for concern if you believe, as I do, that these proposals have the prospect of reducing Federal revenues over the long term?

Mr. GREENSPAN. Congressman, the first thing I would do is something I regrettably haven't done in the last year or 2, that is to urge you to restore pay-go and discretionary caps, because unless you get a budget process system in place which enables you to handle decisionmaking so that priorities can be constructed in a manner which will ultimately get you to where you want to go, I don't know how you do it. And I, remember, had a long regrettable session before a committee of this House in September of 2002 in which I urged that the then-expiring pay-go and discretionary caps be reinstated largely because, much to my surprise, they had been very successful during the period of their existence in requiring an evaluation by the Congress of various alternatives, and recognizing that there is double-entry bookkeeping that one is required to adhere to; that the books have to balance in one way or another, or you have to borrow. And so I think as step number one, that is what I think ought to be done.

Mr. INSLEE. Thank you.

Thank you, Mr. Chair.

Mr. FRANK. Mr. Chairman, I would just ask unanimous consent for 10 seconds to express the hope that at some point Mr. Green-

span will explain what he meant by regrettable in that last characterization.

Mr. GREENSPAN. I am sorry. Regrettable in what context?

Mr. FRANK. You said there was a regrettable appearance before the committee.

Mr. GREENSPAN. Well, I regret the fact that in retrospect I was utterly unsuccessful.

The CHAIRMAN. The gentleman's time has expired.

The gentleman from California Mr. Ose.

Mr. OSE. Thank you, Mr. Chairman.

It is interesting sitting up here listening to the other Members' comments. Coming from California with an embedded unemployment rate of 6-1/2 or 7 percent, we would relish, for instance, the unemployment rate in Vermont of around 3.2 percent. I don't know what the gentleman refers to when he is otherwise berating you, but we would welcome a 3.2 percent unemployment rate in California.

Mr. Chairman, I am overtaxed, overregulated, and overlitigated, just pure and simple, and I am trying to do everything I can to reduce every one of those burdens. I have three primary questions, two of which I would like to submit verbally to you, and then, as I understand it, you can respond in writing.

The first has to do with the Executive Life situation. U.S. Attorney Deborah Yang in Los Angeles recently negotiated a plea with Credit Lyonnais in which they pay the Federal Reserve a penalty of \$100 million for certain transgressions they admitted to. I am curious how the Fed came to that \$100 million number. I am curious how the Fed intends to use that money. Is it going to go to offset the damages that the policyholders of Executive Life suffered, or is it going to be used for some other purpose? That is my first question. I would be happy to submit that in writing.

Mr. GREENSPAN. Well, let me respond to it, if I may.

Mr. OSE. All right.

Mr. GREENSPAN. The actual agreement, as I recall it, is that \$375 million is involved in restoration of losses to policyholders, and that an additional \$175 million is involved from third parties. The 100 million you refer to is a civil penalty related to a violation of the Bank Holding Company Act, and we are required by law to pay that over to the United States Treasury, so that we don't do anything with it.

I believe that the reason it turns out to be that amount is it is the judgment of all the people involved that that was the appropriate amount of fine given the nature of the particular transgression that was involved in that episode. So it is in relation to other related types of violations of the Bank Holding Company Act. I am not sufficiently knowledgeable to know what the general level of fines is but relative to what other transgressions there were, that did, when I heard the number, seem to be the right approximation.

So should those numbers be five times as large or one-third as large? I don't think one can argue. But I do think that for this particular episode, relative to all others, seemed to me, as I had to vote on it, the appropriate number.

Mr. OSE. Do I understand you to say that the \$100 million, the Fed will not get involved in the decision of what happens to that 100 million; that it gets paid over to the Treasury?

Mr. GREENSPAN. That is correct.

Mr. OSE. Thank you.

A question I would like to submit for response in writing has to do with the differing reports regarding job growth, I think, from the Department of Labor in December and a second Federal agency in early January. One showed significant growth, and one showed at best generally flat employment numbers. I will be happy to forward that to you accordingly.

Mr. OSE. But my time being constrained, I want to follow up on Mr. Royce's question. He had asked you about the impact of sales of instruments held by foreign entities on the currency exchange rates, and your response had focused on short-term instruments. And I think your point was that the duration of the instrument is more influential for short-term instruments than otherwise. I am curious of your position of the sale or transactions dealing with longer-term instruments.

Mr. GREENSPAN. Well, clearly if longer-term instruments are sold, the tendency is to have larger price changes, larger capital gains and losses. The reason I raise the issue about the maturity is that central banks try to be highly liquid in their holdings of foreign exchange reserves, which means they tend to have relatively short maturities. And consequently, if they are going to sell, one would presume that of necessity a significant part is going to have to be short-term maturities, which will have only a de minimis effect on interest rates in the United States because the short-term rates are heavily impacted by Federal Reserve policy; longer-term rates are not. And were it the fact that any significant slowdown in accumulation or liquidation were involved, then I would say there would be a greater impact, but my understanding of what the usual holdings of these institutions are, that does not seem to be a significant threat, as best I can judge.

The CHAIRMAN. The gentlemen's time has expired.

Mr. OSE. Just one follow-up, if I may.

The CHAIRMAN. Briefly.

Mr. OSE. Is it your point, then, that the impact of the central bank transactions is constrained due to the duration of the instrument that they are using?

Mr. GREENSPAN. You mean on their part?

Mr. OSE. Yes.

Mr. GREENSPAN. No, it is not constrained. They are doing it voluntarily. I am just merely saying people who are concerned about significant liquidations or changing in investment policy on the part of foreign central banks on interest rates on U.S. Treasury securities are, I think, more concerned than they should be.

Mr. OSE. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. The gentleman's time has expired.

The gentleman from California Mr. Sherman.

Mr. SHERMAN. Thank you, Mr. Chairman.

This has been a surprising week. I opened my L.A. Times yesterday, went to the headline "Bush Supports Shift of Jobs Overseas,"

and then I come to this committee, and just to comment about your opening statement, Mr. Chairman, where you put forth the idea that 6 percent might have once been defined as full employment.

Mr. GREENSPAN. I don't remember my saying that.

Mr. SHERMAN. No, no, you didn't. The other chairman. We have two chairmen in the room.

Mr. GREENSPAN. I beg your pardon.

Mr. SHERMAN. And I would say that I think we are about the same age. When I was studying economics, they told me 3 percent was full employment. A decade or two later, maybe 4 percent. And if 6 percent was full employment, then today we would have an unemployment rate that was too low, which is at least not what I am hearing from my constituents.

The other Mr. Chairman. Back in 1997, you testified to us, I was a green Member of this House, before the Budget Committee, that the CPI as calculated overstated the rate of inflation, and that hence the inflationary increases to Social Security checks are a point, a point and a half higher than they need to be to maintain purchasing power. Is that still your position, or have they made such enormous improvements over at the Bureau of Labor and Statistics that we now can rely that that CPI Index is something you would support?

Mr. GREENSPAN. The Bureau of Labor and Statistics has indeed made significant changes and very materially improved the existing published index. However, they also have an index called the CPI Chained Index, which is far more realistic with respect to measuring the cost of living. That is not officially employed in either indexing of the tax system or of outlays or benefits. If it were or, say, had been employed instead of the current published CPI, we would have had a fairly significant reduction cumulatively in the budget deficit. About 60 percent, as I recall, would have come out of increased revenues, because the indexing would have been slower, and about 40 percent out of entitlements. So——

Mr. SHERMAN. So if this superior index had been used, today's Social Security check would be 4 or 5 percent lower than the checks we just made out?

Mr. GREENSPAN. No, that is a larger number than I think.

Mr. SHERMAN. But it would be, what, about a point a year over the last 5 years, or less than that?

Mr. GREENSPAN. No. It would be in the few tenths per year, and the tax revenues would have been higher by a somewhat higher proportion.

Mr. SHERMAN. We have got the largest trade deficit in history. We are perhaps the only government in history that thinks exporting jobs is good, imports are good. You have got two large Asian governments that are pushing their currencies down vis-a-vis ours both by buying U.S. Treasuries on the one hand, and, in the case of China, adding to that a fixing of its rate of exchange with us.

If the Japanese and Chinese Government simply abandon all efforts to influence currency values, what effect would that have on the yen and yuan dollar exchange rate, and what effect would that have on the trade deficit? This is no small question, I realize.

Mr. GREENSPAN. The general view in the marketplace is that there is a so-called home bias in Japan with respect to holding yen

as distinct from foreign currencies. The consequence of that is basically to raise the long-term value of exchange rate in international markets, because obviously if households are not buying any foreign asset, nor, in fact, are financial institutions, in any significant measure, you are having an abnormal reduction in the demand for external currencies, which means you have upward pressure on the yen.

The institution, the ministry Finance has been, as you well know, endeavoring to hold the rate down by significant purchases of dollars. And one must presume that were that procedure abandoned, for a short time at least, the yen exchange rate would go up. My own impression is it would only go up for a while, but not stay there.

The issue of China is a little more complex in the fact that they have capital controls in place. But, again, what that does is to create a lesser demand for foreign currencies because Chinese residents are inhibited in what they can buy with respect to what they can invest in foreign currency. So one also presumes that were the purchases reduced or ceased, then exchange rates would rise accordingly.

The CHAIRMAN. The gentleman's time has expired.

The gentleman from North Carolina.

Mr. JONES. Mr. Chairman, thank you very much.

Mr. Greenspan, I would like to ask you a yes or no question. Have you had a chance to read Paul O'Neill's book, *The Price of Loyalty*?

Mr. GREENSPAN. I have glanced at it. I have not had a chance yet to read it.

Mr. JONES. Well, I have found it in a positive way very interesting, the relationship, a positive relationship of you and Mr. O'Neill and how you discuss the monetary issues that we are facing in our Nation under the new President. And for any of my colleagues, whether they be Republican or Democrat, if they haven't read it, I think they would find it very interesting.

I do want to pick up very briefly, because you have answered both sides as it relates to outsourcing. I am from North Carolina. I share the concern of Mr. Watt, who spoke earlier; Mr. Manzullo, who just spoke. You were quoted in the *Washington Post* yesterday, and I want to read this accurately. It says: Greenspan counsels that workers hurt by outsourcing can be confident that new jobs will be displaced over old ones, as they always have. Yet you answered a question on one of the questions earlier that said that you know that approximately 2 million people have been out of work for 1 year who are out here looking for jobs.

My question is, when you give an answer to a person or a group of people that are losing their jobs, and they are doing the very best they can, trying to get educated in different areas of training so they can get a job, how long does it take for this transition to take place?

Mr. GREENSPAN. I think that is obviously the relevant question. And the context in which I was using it was over a period of several years, because if you look at the data that underlies all of these relationships, it appears that over time we, in effect, employ 94, 95 percent of the workforce, and that as jobs are lost, they obvi-

ously must have been replaced, and indeed at increasingly higher wage rates, because the real incomes are going up as well.

It is the transition which is so difficult and so stressful for people, because as I mentioned before, we are dealing with a weekly turnover of a million jobs. And the fact that a significant part of them, like two-fifths, are involuntary means that a lot of people are losing their job every week.

Yet if you look over a protracted period of time, you find that an ever-increasing number of Americans are employed in ever-higher-paying jobs. Something must have happened between state one and state two, so to speak. And is basically human ingenuity always finds new ways of doing things, and there are always new jobs being created. And indeed that must be the fact, or our numbers are all wrong, and we have every reason to believe that they are fairly accurate.

The reason it is a problem is that most of the new jobs are relatively high-tech, and one of the things you can't do is forecast what innovation is going to be. And so when you ask, you know, what new jobs will there be, and where are they, it is very difficult to tell in advance. But they are there, as I put it, the quote is correct, as they always have been. And I know of nothing to suggest that that process is in any way changed in this particular period.

Mr. JONES. Well, I have great respect for your knowledge and ability, and I can only say that I hope that this transition takes a fast—is in a faster pace than it is now, because people are hurting throughout this country. And I have never seen quite the frustration I have seen. My father was in Congress for 26 years; he was a Democratic Congressman. I am here as a Republican, came in 1994. And some of my colleagues have said this: I have never seen the frustration I am seeing now. So I hope we as a government and Congress and the Presidency and you and the Fed, that we can somehow bring some confidence to a lot of people that I think are hurting pretty badly.

Let me touch on one other issue, and then this will be my last question, Mr. Chairman.

As people are losing their jobs, and some are getting lesser jobs, meaning income, lesser jobs, do you see any signs that concern you or the Fed that the consumer using his credit card is beginning to get into a dangerous area?

Mr. GREENSPAN. There is a general rule that we usually adhere to which sometimes is right, most of the time is right, sometimes is wrong: That the person who knows best about what they can take on in credit is usually the consumer himself, and that as a general proposition has proved over the years.

We are nonetheless aware that there are innumerable cases and highly publicized cases of egregious behavior on the part of numbers of people in the financial area. The debt servicing charges of credit cards are rising, and it is hard to tell whether there is merely the fact that technology is improving, finance is improving, and this is just a normal course of how people deal.

I mean, for example, we have this great concern that mortgages continue to rise relative to income. Well, it has, it is, and it is rising significantly, but that has been going on for 50 years. And the problem is that the asset side of the household balance sheet has

been rising as well, and hence the true burden of the debt is matched by the assets.

And I suspect, but I don't know for sure, that in most cases that is largely the issue with credit card debt; that merely looking at the debt or what the monthly payment is relative to income forgets the fact that assets in households relative to income are also rising progressively. And as a consequence, we at this stage are not overly concerned that there are debt burdens which are very difficult for the American public to handle on average. I mean, obviously when you integrate that with the job problem of people losing jobs, that is where most of the difficulty occurs, but on an ongoing basis, people who are employed are reasonably successful in knowing how to handle their credit cards and their debt burdens generally.

The CHAIRMAN. The gentleman's time has expired.

The Chair would announce that we have been notified by the floor we will have a vote somewhere between 1:30 and 2:00. The Chairman has been kind enough to stay—announce he is going to stay until 2:00. I want to let everybody have an opportunity to answer questions. We are going to try to stay strictly to 5 minutes as best we can. And I thank the Chairman.

And I would now recognize the gentlelady from Oregon Ms. Hooley.

Ms. HOOLEY. Thank you.

Chairman Greenspan, we are glad you are here. Thank you for coming. I have a couple questions.

We see every day that there are new corporations that are off-shore outsourcing. In fact, it reminds me about 3 years ago of a train going up a hill, and all of a sudden we reach the top of the hill, and now outsourcing is like that train going quickly down the tracks. I am very interested in your views about this trend, and I am particularly interested in how you feel about American consumers' personal financial, medical information being sent abroad to call centers, to filing centers. The consumer reporting agencies are now sending their credit files abroad because of outsourcing, and I am concerned about exactly what happens, or what could happen, once that information is outside our borders.

Do you believe this information is adequately protected when it crosses our borders, and do you feel that anything should be done to increase the protection of this sensitive data? First question.

Let me get you the second question quickly. We just had a discussion about the outsourcing, where the new job is going to be. I can remember when we had talks about trade, and during those debates it was argued that while manufacturing jobs may be lost because of a result of those agreements, that overall this loss would serve a greater good by refocusing our economy and displaced workers on more productive sectors such as high-tech or service industry jobs. And now those jobs are being outsourced to foreign countries.

My question is this—second question: Now that we have exported our manufacturing jobs, now that we are exporting our high-tech jobs and our service jobs, what areas are left for us to devote our productivity toward? I mean, we talked about people being unemployed. I mean, these people are desperate, they can't find a job. They have said to me over and over again, look, we want retrain-

ing, we just need to know what is out there in the future, what direction should we go when we are being retrained. And I just want to know, you know, what sectors of our economy are going to drive this massive job growth? People want to know that.

And you are right, the transition is hard, but what do you tell people how should they be retrained? What does our future economic growth look like?

Mr. GREENSPAN. Well, Congresswoman, with respect to your first question, I think it is an interesting issue with respect to the privacy and security of a number of the types of issues that occur when you are moving information and data over satellite transmission. I assume that everything is appropriately encrypted and that the security is as good as you can make it. And, indeed, we have that problem domestically with a vast proportion of data of a very private nature moving across our own country. My own impression is that the encryption is not bad, and, in fact, they do a reasonably good job, but I don't know that for sure.

On the issue of the outsourcing and the jobs question, there are two problems here—factual questions. Let me take a step back. What we do know is that, as I have mentioned several times here today, that we are confronted with the fact that jobs continuously increase in the country over, say, 3-year moving averages at ever higher real wages, meaning wages that enable people who earn them to effectively purchase ever more amounts of real goods. And so we have this problem which how is it possible that on the one hand our data system is saying that jobs are forthcoming and at ever higher wages, but we hear of all of these problems which everyone is having? And they are real problems. It is not just anecdotal, minor issues. There are real hardships out there for very large numbers of people.

I suspect that part of the reason why we are running into this issue is the fact that jobs, the level of jobs has actually gone down as much as it has gone down for a significant period of time, and that in turn is directly related to this extraordinary acceleration in productivity. And that puts us in a very difficult dilemma.

We cannot, I would hope, be against increased efficiency and increased productivity which enhances the standard of living, yet we cannot deny that there has been a fairly significant reduction in jobs as a consequence of that. And what that then does is it emphasizes all of the problems of perceived job loss occurring as a result of imports, whether it is goods or services or outsourcing or whatever. And I believe, although obviously it is a forecast, that this is going to change, and it is going to change because I find it utterly inconceivable that an advanced society such as ours can continue to grow output per hour at the rate we have been going at, and that it must eventually regress back to a more sustainable normal level. When that happens, things will change, but until it happens, I think we have the types of problems which you are very correctly outlining.

The CHAIRMAN. The gentlewoman's time has expired.

The gentleman from Iowa.

Mr. LEACH. Thank you, Mr. Chairman.

Mr. Chairman, in thinking through your testimony today, frankly, in prior testimony yourself and prior Fed Chairmen, it strikes

me that the Fed congressional exchange is largely about the politics of economics and the economics of politics. And on the first side we in the elected branch ask you questions about interest rates, price stability, economic growth, jobs. And as I look and think over this testimony, there is very little complaint on the first two. In fact, your records are—as Chairman of the Federal Reserve, is sterling on interest rates, it is sterling on price stability.

On the jobs front, of which you share accountability with all sorts of sectors of the economy as well as the government, we are in an imperfect situation. But I am hard pressed not to think, A, that you are very wise to suggest that our current job situation could improve without affecting price stability; and that is excellent advice; but secondly, that we would be in far worse shape even though the situation is currently imperfect if we didn't have price stability and didn't have low interest rates.

And so it is hard from a congressional perspective on the subject of the politics of economics not to give you exceedingly high marks. And then on the reverse, on the economics of politics, it is hard to think that you are not giving Congress rather low marks, and that you are warning about the deficits, and you are also warning in a—what I think is a most abnormal part of your testimony today—and not that it is abnormal to your thinking, but abnormal in your emphasis—to raise the protectionist warning. And as we look at politics, that is becoming an increasingly significant issue.

And so what I would like to ask you today is two questions. One, if you could mete out further your concerns on protectionism. I mean, for instance, I have always thought that protectionism, the jobs it really most protects are those in politics rather than those in the economy. But is it your view that if America moves in a far more protectionist direction, we will lose or we will gain jobs? And can you assess that for the committee as an observation from a professional economics and from a monetary authority perspective? And then I have one further question after that.

Mr. GREENSPAN. I think it is indeterminate. I think one thing that you can say about protectionism is it will reduce the average standard of living, but it doesn't offer any significant insight into what the level of jobs will be, because the issue of jobs is determined in a broader international context. And while I don't deny that there are relationships between protectionism and jobs, I would say that is not the issue. The issue is standard of living and the stability of the economics system.

My concern about protectionism is that it could create very significant distortions in the financial system, international financial system. And importantly and almost without question, to the extent that we succeeded in closing our borders to trade, our standard of living would invariably decline. It may decline in the context of a very high rate of employment or a very high rate of unemployment. But the one thing is certain is that our standard of living will decline.

Mr. LEACH. My second question relates to the other somewhat abnormal part of your testimony which relates to the changing value of the dollar relative to other currencies. And one of the great questions in the international economy today is that if the value of the dollar depreciates further, will this cause inflationary pres-

tures in the United States of any significance? Or do you think that that is a circumstance that is offset by increases in productivity and the continued increase in productivity abroad as well as here?

Mr. GREENSPAN. As I pointed out in my prepared remarks, Congressman, we have seen, as you know, quite a significant reduction in the value of the dollar on a trade-weighted basis, and we would have expected to see a corresponding rise in the dollar value of the imports or the dollar price of imports if foreign exporters were successful in keeping their profit margins in their domestic currencies constant.

Now, what we find in the data is that the increase in the dollar price of imports has gone up much less than that which would have kept the exporters' margins constant, which leads me to conclude that they have had a margin squeeze, but observing, let us say, amongst the Europeans that exports out of Europe denominated in euros have been relatively flat. Now, what that says is that the incentives that one would have expected to be cut off by the sharp rise in the euro and the decline in the dollar would have induced a significant contraction of exports from Europe to the United States. That did not happen.

We conclude on the basis of other data that there has been a very major increase in hedging by foreign exporters essentially shorting the dollar, and the realized capital gains from the hedged short position offset in part the loss in profits that occurred as a consequence of the rise in the euro vis-a-vis the dollar. And that is one of the reasons why we have not seen a significant impact at all on domestic U.S. inflation as a consequence of the decline in the dollar if you don't generalize that type of analysis worldwide.

However, as I also indicated, that cannot go on indefinitely. The adjust processes will invariably occur if the exchange rate were to continue lower.

The impact, however, has certainly to date been very modest. But in principle, over time you have to get a reflection in the domestic price level because you cannot continuously hedge in these markets, because hedging is actually quite expensive.

So the answer is to date we have seen very little effect of the decline in the dollar on American inflation. If it should continue, however, then we would begin to see some rise in import prices, and, because of that, some impact on overall American inflation. But even under those conditions, the numbers look really quite small, and as a consequence it is not something which gives us considerable concern at this point.

The CHAIRMAN. The gentlelady from California.

Ms. LEE. Thank you, Mr. Chairman.

Once again, Mr. Greenspan, it is good to see you here today.

Let me follow up with Ms. Hooley's question in terms of your response. First of all, with regard to outsourcing, you indicated it does put us in a dilemma, which we all understand. But you also mentioned that there is a perceived problem of job loss as a result of imports. But I think that problem is not perceived, Mr. Chairman. That is very real. We have lost 3 million jobs, many of which—

Mr. GREENSPAN. No, may I interrupt you? When I uttered that word, I said I wish I could edit that word out.

Ms. LEE. Well, please do.

Mr. GREENSPAN. I just did.

Ms. LEE. Thank you very much, Mr. Chairman. You know, I gave you that opportunity, so I am glad I was here to hear that.

Let me ask you, though, where are the jobs of the future? We are telling our young people get trained, go to school. They are playing, most of them, playing by the rules only to find that when they get out of school, there are no jobs. Manufacturing, high-tech, service jobs are gone. So what do we tell our young people, especially in communities of color? We have young people who just can't get jobs, who resort to economic activity that leads to crime, to incarceration. Where are the jobs of the future? And how do we convince our young people that going to school, playing by the rules is still the thing to do?

Mr. GREENSPAN. I think that is a very important issue, and what I would say to you is the following: That what we do know is that those individuals who are highly schooled, who have capabilities in math and the sciences or who are literate, or who have specific skills which are competitive skills, those people when they get jobs do well. When you have hiring virtually stagnant, what skills you have doesn't matter.

If I believe that were going on indefinitely, then I would say to you, I don't know what to answer, but I am reasonably sure that this is a temporary phenomenon that will change. But even when the job market opens up and people start to hire, I would still have some problems in actually designating where those jobs are going to be, because, as I mentioned before, a significant part of these jobs are from innovation, and it is very difficult to forecast what is going to happen.

All I can say to you is that what history tells us is that those people who are most educated, who have the most general skills, meaning those who can write well, who can do arithmetic or beyond that, who have generic skills which you basically learn through elementary school, through high school mainly, those people are positioned to take whatever jobs are created even if you don't know in advance what they will be.

Ms. LEE. Mr. Chairman, it is hard to convince young people then to stay in school and acquire these skills when, in fact, they are looking for a job at the end of the road.

Mr. GREENSPAN. I cannot disagree with what you said. It is not an easy issue. And if there were a simple way, I could tell you, tell them X, Y, and Z; I would give you X, Y, and Z. All I can tell you is what the facts are. But to try to convince somebody of a fairly complex issue, namely if you do this, this will happen, that is not an easy—

Ms. LEE. It is not easy, but it is a sad state of affairs if we can't figure that out, Mr. Chairman, because we have millions of young people who want us to figure that out in terms of their educational pursuits.

Let me also say to you that those individuals with highly developed skills, with graduate degrees in math and science and technology, we are finding now that engineers are laid off. They can't

find work. You look at what has happened in Silicon Valley, people with those types of backgrounds are unemployed, and so we can't even say that they are part of the future in this country. So I am not so sure if we have actually looked in the right direction for the right answers.

Finally, let me just ask you about the unemployment rate in the Latino and African American community. Given the fact that this administration doesn't believe much in stimulative spending, what do you think is the answer given the historical neglect of many of our communities of color? What do we do in terms of encouraging African Americans and Latinos to develop their skills and find jobs when, in fact, the unemployment rates are going up and not down?

Mr. GREENSPAN. If jobs are not available, you have a hopeless task. The only way that you have possibilities of success is if you have an economy in which jobs are growing and opportunities are growing. And, indeed, as I mentioned several times before, that has been the history of this country, and I see no reason to expect that it will change.

It doesn't take very much to go back in earlier periods, early 1980s, 1975, earlier periods especially before World War II or even the Great Depression. I mean, things were really awful. I mean, it is very tough, and it is very discouraging, but we came out of that. In other words, there were people in 1975, and I remember I was working in government, that we were not going to get out of the recession that we were in, and that job loss was horrendous, the stress and difficulties people had were never going to change. And if you believe that, it is very discouraging.

I happen not to believe that. And I understand that there are very significant problems currently in the job market, and if I didn't believe it was going to change, I would be very discouraged. But I think it will.

The CHAIRMAN. The gentlelady's time has expired.

The gentleman from Pennsylvania.

Mr. TOOMEY. Thank you, Mr. Chairman.

Thank you, Chairman Greenspan, for your testimony today. I have two questions for you. The first is kind of a follow-up on this jobs question. More specifically—and I apologize if you have addressed this earlier, but my understanding is we haven't developed this, and that is what, if I am correct, is a growing recent discrepancy between the payroll job numbers and the household survey numbers. It seems to me that in recent months that discrepancy has been wider than it has been historically. And at first blush one looks at this and says, well, we know that the payroll job growth necessarily excludes many people from the workforce, namely those who are not on someone's payroll. The household survey therefore would seem to have the merit of being broader in the sense that it captures those people who are individual proprietors working from their home not on a payroll.

I guess my question is, on the household survey basis, job growth has been quite strong actually in at least recent months, reasonably strong, much stronger than payroll. Is there something systemic going on in the economy where the picture is actually better than what the payroll numbers suggest? Is the household survey

more reliable than it once was? Is there something that we should be looking at between these two?

Mr. GREENSPAN. Well, Congressman, I wish I could say the household data were the more accurate. Everything we have looked at suggests that it is the payroll data which are the series which you have to follow, and for several reasons. First, the payroll data are essentially based on quarterly estimates from the Unemployment Insurance Fund data system, which picks up a very big chunk of wage and salary incomes and hence employment. So it is benchmarked on reasonably hard data.

The payroll series, to be sure, does not include proprietors, does not include farm workers, and there is a whole series of other; it includes multiple jobs. But when you make all of those conceptual reconciliations, you still have a yawning gap between these two trends. If you believe the household data, jobs are recovering measurably. If you believe the payroll data, that is not the case.

What one of the things I suspect is the problem is that we have estimates of population which we link to the last census data, which is 2000. We add births, subtract deaths, and we add net immigration. The household data, remember, is a 50,000 or 60,000 sample of households, and all they get are ratios of the total people in the household, how many are employed, how many are not employed. And those ratios are linked to the independent estimate of population. And, hence, you get your employment data as a direct reflection of the population numbers, which we suspect are overestimating the growth in the population of the United States.

Working backwards, assuming that all of the workers who report to the unemployment insurance system, which is full coverage for certain groups of people, and then try to add to that proprietors who we pick up from the household survey and a number of other relationships, we can build up to a synthetic population number measured independently of the way it is done in the Census Bureau. And, lo and behold, what we find is a much slower rate of population growth and, by implication, a lower rate of net immigration.

I would point out that in the figures just released for the month of January, they have already made a correction of something of like about 400,000 jobs and about a half a million in population. So the issue is being joined.

All I can say to you is having looked at both sets of data in some considerable detail, it is our judgment that as much as we would like the household data to be the more accurate, regrettably that turns out not to be the case.

Mr. TOOMEY. Is there a reason that this discrepancy has widened in recent months versus the past?

Mr. GREENSPAN. Well, part of it is that remember that even though it is a very large sample, the household is a sample, and it has so-called variance or discrepancy in it. When you basically take the households from 50,000 or 60,000 up to something over 100 million, you happen to have a large potential element of error there, and I think that that is part of the problem.

The CHAIRMAN. The gentleman's time has expired.

The gentleman from Kansas will be our last questioner.

Mr. MOORE. Thank you, Mr. Chairman.

And thank you, Chairman Greenspan, for being here.

In the 25 years I practiced law before coming here, I learned there are at least two sides to every story. And I appreciate the fact of the 5 years I have been in Congress, you have come here and shown at least both sides and some good news and bad news about any situation.

The good news here obviously is we have come through some rough economic times, and we are still maybe in those economic times. But you point out there are some positive indicators, such as the lowest interest rates in 45 years, increased productivity, and low inflation. You also expressed some concerns; for example, the imbalance in the Federal budgetary situation unless addressed soon will pose serious longer-term fiscal difficulties. And also Federal budget deficits could cause difficulties in the relatively near term. And you also cite a statement from OMB that says very sizable deficits are in prospect in the years to come.

My comment then here is this. I have concerns as well, Mr. Chairman. I would like your reaction, I guess. We have a \$7.1 trillion national debt, we have a projected deficit of \$521 billion, and not including the Iraqi supplemental that the Director of the OMB talked about. We have a debt tax of almost a billion dollars a day of interest rate on the national debt, of a billion dollars a day. And I am concerned, I guess, and remembering back on your testimony for the 5 years I have been here and trying to put this all in perspective, you have cautioned us about the prospect of rising interest rates if—not if, but when our economy takes off, if we are not acting in a fiscally responsible manner. And I am old enough to remember the 1970s, and I remember interest rates of 12, 14, 16 percent, which I think would be absolutely devastating to the business community and this country, to real estate, to consumer borrowing, all of those things if that happened again. Should I be concerned about that, or is that not a concern, Mr. Chairman?

Mr. GREENSPAN. I frankly cannot conceive that returning to us. It would require a highly inflationary economy, which I trust that we have learned to avoid in this country. Certainly the Federal Reserve, having been through those earlier periods, is acutely aware of the critical importance of maintaining price stability, and with price stability, we won't see those interest rates.

We have to be aware of what the longer-term outlooks are and where changes are required and what we can do about them. The longer-term fiscal problems things are very easy to forecast, because one thing which we know for a reasonable certainty is that the baby boom generation currently in the labor force will gradually move from the labor force and productive work, creating tax revenues, to retirement. And we have on the books at this stage levels of entitlement commitments which, when you multiply them by the relatively certain level of retirees we are going to have out there, we have got some very serious problems of fiscal balance that have got to be addressed. And the sooner we do that and the sooner we start to take action to glide-path into those types of problems, the less the adjustments are going to be. And so I have argued that the sooner we can come to grips with them, the better off we will be for lots of different reasons.

Mr. MOORE. If we don't do that soon or do it later, what happens to future generations, our children and grandchildren, when we start to retire—and I am saying we, and I am a baby boomer—what happens?

Mr. GREENSPAN. Well, the basic problem is the long-term Federal debt. I might add, the 7 trillion figure that you use, that is a gross number.

Mr. MOORE. Yes, sir.

Mr. GREENSPAN. But the net figure, which is half that, does not include the contingent liabilities that we have. I mean, we call our commitments under Social Security contingent liabilities, but I find it utterly noncredible that the Congress is going to significantly alter the general path in a way which is going to be other than a fraction of what is now a \$10 trillion contingent liability. I don't deny that it can be cut back, but a very large part of that 10 trillion to me is real debt and indistinguishable.

Mr. MOORE. Thank you very much.

The CHAIRMAN. The gentleman's time has expired.

Before dismissing our witness, let me say the Chair notes that some Members may have additional questions for the Chairman which they may wish to submit in writing. Without objection, the hearing record will remain open for 30 days for Members to submit written questions to the witness, and to place their responses in the record.

Mr. Chairman, once again we thank you for your excellent testimony. It is always good to have you here, and we look forward—I don't know whether you will or not, but we will look forward to having you back in about 6 months.

The hearing is adjourned.

[Whereupon, at 1:58 p.m., the committee was adjourned.]

A P P E N D I X

February 11, 2004

Opening Statement
Chairman Michael G. Oxley
Committee on Financial Services

**Full Committee Hearing to Receive Testimony of
Federal Reserve Chairman Alan Greenspan
February 11, 2004**

Good morning, Mr. Chairman, and welcome back to the Committee.

All of us on the Financial Services Committee look forward to our discussions with you on U.S. economic performance, which so directly affects the lives and livelihoods of all Americans.

At this unique economic moment of war and renewal, there are many who deserve credit for the recovering economy. First and foremost are the American people--the American investor, who didn't panic and never lost faith, and the American consumer, who believes that the economy will continue to improve.

Our American companies have retooled in accordance with the Sarbanes-Oxley Act, thus improving financial reporting and bolstering confidence. Our markets continue to be the most productive capital creation organizations in the world. Despite predictions that companies would delist, they have not done so. In fact, companies continue to seek new listings in our deep and vibrant U.S. markets.

Mr. Chairman, the economy is recovering nicely from the mild recession of 2001. The market is back to pre-recession levels, fixed investment is up, unemployment is down from its peak, exports are up, the balance of payments is down, and none of the Blue Chip 50 forecasters predict growth rates of less than the mid-three percent rate or inflation higher than the mid-two percent ranges for this year or next. Most of the Blue Chip forecasts are much more optimistic.

Two items that have everyone's attention are the employment figures and the deficit numbers. There is understandable concern about both. I'm sure we would all prefer budget surpluses and would like every American who seeks a job to have one, right now. However, I believe these are temporary problems attributable to temporary conditions.

Despite some alarmist commentary, the deficit numbers for this year are understandable given the terror attack, a recession, corporate governance problems, and war. While they are higher than we would like, even after all of these events, the deficit is still at only about 3.5 percent of GDP. According to the President's budget, the deficit will be half that level in five years. The alternative would be to stop investing in economic stimulus or to fight against terror on the cheap, and I don't think the American people would want either of those options.

Oxley, page two
February 11, 2004

Mr. Chairman, I know you favor pay-as-you-go budgeting. However, the President's tax cuts have helped to sustain the U.S. economy especially in the face of recent shocks. In addition to the headline-grabbers of terrorism, war, and corporate scandal, we faced a European currency unit that sank in value by a third, which damaged the value of our exports.

Regarding employment levels, Mr. Chairman, I hope that you will be able to add some perspective to the national debate. When I studied economics, and until just a few years ago, the accepted theory was that roughly six percent was full employment. This is about where we are now. During the bubble economy of the late 1990s, that rate went down in the four percent range and briefly hovered at 3.9 percent. To many of us, it seemed as if one of the laws of economics had been repealed.

Then, with the recession, unemployment increased again, over 6 percent, though I should quickly add we have been seeing steady job creation since late July.

Mr. Chairman, I think most of us on both sides of the aisle believe the American economy will create additional jobs, and their quality will improve as the economy continues to adapt to changing times. We would welcome your thoughts on job creation and what we in Congress might do to help.

With that, Mr. Chairman, I look forward to your appearance here, which is always a great occasion for this Committee. We thank you for your stewardship of the economy, and I now yield to the gentleman from Massachusetts, Mr. Frank, for his opening statement.

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CONGRESSMAN JOE BACA

February 11, 2004

I want to thank Chairman Greenspan for appearing here today. I look forward to hearing your testimony and asking tough but necessary questions regarding the state of our nation's economy.

I am concerned with the current unemployment rate that seems to be rising so fast, especially for Hispanics and African Americans. President Bush has overseen the disappearance of a record 2.9 million private sector jobs since 2001. The overall unemployment rate fell to 5.6%, but this is mostly due to the 1.7 million Americans who are no longer searching for employment. The Hispanic rate rose from 6.6% to 7.3%. The manufacturing sector shed 2.8 million jobs in three years, job losses that disproportionately hurt Hispanics.

Over the past year, many pundits and forecasters have said that the job market is going to improve, they say things are going to turn around. This past Monday, President Bush predicted 2.6 million jobs would be created this year. But how can we trust him? In 2002 he predicted 3 million jobs would be created in 2003. As the residents of the Inland Empire know all too well, the economy instead lost 53,000 jobs.

Hispanics and other minorities are being hit hard. We are out of work at higher rates than ever before. Unemployment benefits are ending. Food banks and hunger organizations report that more people are asking for help.

We are marching towards a jobless recovery. Corporate profits are expected to rise by 17% this year but average wages for those who have jobs has fallen. Hispanics and other minorities are suffering. No one is hiring. Their benefits are gone. And people don't know what to do. Who is going to help?

I want to know what the President is going to do about this? Income tax cuts are fine but they don't make sense when people don't have incomes.

Statement of Congressman Michael N. Castle
Full Committee Hearing to
Receive Testimony of Federal Reserve Chairman Alan Greenspan
February 11, 2004

Thank you Chairman Oxley and Subcommittee Chairman King for holding our biannual hearing to receive testimony from Federal Reserve Chairman Alan Greenspan on the state of the economy and monetary policy. Mr. Greenspan, we are honored to have you before our committee.

As we begin the second session of Congress there are a number of important issues that are before this committee and this Congress, but perhaps the most important because it transcends everything is the federal deficit. President Bush outlined his Fiscal Year 2005 proposed budget to Congress last week. I share the President's focus on cutting the deficit in half and working towards surpluses. I support that goal whole-heartedly. There are, however, many assumptions in the President's proposal that have yet to be vetted in Congress. Many in Congress are committed to reducing our current deficit and as we examine the President's proposal, I find Mr. Greenspan's perspective to be beneficial. I believe this process can not be done in a bubble -- we must examine mandatory and discretionary spending as well as revenues and the budget process itself. We must be willing to put everything on the table and make some hard decisions.

As you know, almost 80 percent of the budget is fixed before Congress even begins to adjust spending for the next fiscal year. Therefore, we cannot depend solely on the remaining 20 percent. I am greatly concerned by the fact that the "baby boomer generation" is going to be entering their retirement years very shortly -- at this point I am not sure that the money coming into programs will outpace the outgoing costs generated.

The Honorable David Walker, U.S. Comptroller General, has estimated the Medicare Hospital Insurance Trust Fund will face a cash deficit in 2013, Social Security will face a cash deficit in 2018. Since the payout is based on population, how can we prevent the entitlements from consuming 100 percent of the federal budget in 50 years? In the past twenty years the percentage of the mandatory spending has already grown 10 percent. These numbers will only grow exponentially over time, Mr. Walker reports the combined deficit from these programs will reach \$500 billion before 2035. Clearly, targeting non-defense and non-homeland security discretionary spending alone will not have a significant impact on the deficit.

Mr. Walker has also stated that there needs to be a combination of spending restraint and economic growth to close the current fiscal gap. Relying on growth alone would require double digit annual growth for the next 75 years. The deficit is on course to grow. We must put everything on the table, from revenue sources to federal government programs -- all must be examined.

Hard choices need to be made and I think it is time that both parties put their favorite "cash cows" on the table -- all subject to the same scrutiny. I believe the meaning of "leadership" is not only fighting for your district or state, it also has to mean protecting the future of our economy -- to ensure that our schools run, our Medicare checks can be cashed and families can put food on the table.

Statement of the Honorable Rahm Emanuel
 United States House of Representatives
 Committee on Financial Services
 February 11, 2004

Hearing on the Conduct of Monetary Policy and the state of the Economy

Mr. Chairman, I would like to thank you for holding this important hearing on monetary policy and the state of the economy. I also appreciate that Chairman Greenspan has taken the time to share his views with us on these subjects.

Mr. Chairman, the Administration's pronouncements on the economy during the past week appear to be detached from the realities facing working families. President Bush said "America's economy is strong and getting stronger," and his Council of Economic Advisors predicted that 3.9 million jobs, or 325,000 a month, would be created this year.

CEA Director N. Gregory Mankiw expressed the Administration's novel view that the outsourcing of American jobs is a boon to economic growth. Thousands of American working families whose jobs have been shipped overseas, like those who lost programming jobs at IBM to India, China, and Latin America, don't see it in the same way as the President. They need jobs here at home and an economic plan that is in balance with their priorities.

While we have seen hopeful signs of a recovery through rising equity markets and increases in corporate productivity, we still face a skyrocketing deficit, a wage recession and a jobless recovery with 2.9 million private sector jobs lost since President Bush took office.

Millions of Americans continue to search for work to no avail. My home state of Illinois has been hit particularly hard, with a current unemployment rate of 6.4%. More than 190,000 private sector jobs have been lost in Illinois since 2001, including 125,900 manufacturing jobs.

These are not just numbers, Mr. Chairman. They represent people and families with debts and health care needs. They are hurting deeply. They need, want, and expect our national leaders to feel and express a sense of urgency about this economy.

The reality is that those numbers actually understate the lack of available jobs. As a number of observers have commented, the unemployment numbers are misleading because they do not reflect the 500,000 "discouraged" Americans who have stopped looking for work and are no longer counted among the jobless.

The difficult job market is devastating to families already grappling with rising education and health care costs, increasing household debt and higher state and local taxes. The last three years have shown us that three wars cannot be financed with three tax cuts, and that

tax cuts for the wealthy do little to help middle-class families send their kids to college, plan for retirement, or care for sick relatives.

President Bush's tax cuts are the single largest contributor to the federal deficit, despite his attempts to shift the blame for our fiscal deterioration to 9-11, the "inherited recession," and corporate scandals. Despite our challenging economic conditions, however, President Bush continues to insist on permanently extending his tax cuts for the wealthiest Americans.

The \$521 billion deficit his budget creates is a concrete measure of President Bush's refusal to acknowledge the consequences of his decisions. The Administration has proposed to cut the deficit in half in 5 years. But mainstream economists and investment banks like Goldman Sachs say President Bush's plan is "not credible." They call it an accounting fiction, because it doesn't account for the new spending associated with President Bush's own priorities, including ongoing expenses for our efforts in Iraq and Afghanistan and the push to make his tax cuts permanent. Projections by the bipartisan Concord Coalition and the Center on Budget and Policy Priorities peg the deficit price tag over the ten-year period of 2004-2013 at \$5 trillion.

Mr. Chairman, these are not partisan issues. We face serious financial, fiscal and geopolitical challenges, including the ongoing threat of terrorism, an ongoing commitment in Iraq, and the growing cost of senior entitlements like Social Security and Medicare. We have to consider each of these challenges within the context of a deteriorating fiscal outlook. We are at crossroads unlike any other in recent memory.

I am hopeful that we can work together and address these issues in a balanced, measured, and bipartisan way. We should begin to travel the path back to fiscal responsibility by rejecting President Bush's call to make his tax cuts permanent. Instead, we should roll back his tax cuts for the top two income brackets and retain the estate tax for the very wealthiest families so that we can begin to pay down the deficit.

Mr. Chairman, I strongly encourage Chairman Greenspan to support policies that restore fiscal discipline, that stimulate job creation now--not years into the future -- and that focus resources on those who need help the most right now -- not those who are doing fine without it.

February 11, 2004

Opening Statement by Congressman Paul E. Gillmor

House Financial Services Committee

Full Committee

**Hearing to Receive the Monetary Policy Testimony of Alan Greenspan, Chairman
of the Federal Reserve Board of Governors**

Thank you, Mr. Chairman, for calling this important hearing and allowing us this opportunity to discuss our current monetary policy. I'd also like to thank Chairman Greenspan for making himself available to the Committee this morning and for his willingness to share his wisdom on our current economic conditions.

As the President indicated in his Economic Report transmitted to Congress, "America's economy is strong and getting stronger," but there are important challenges still being faced as we move forward to continue growing the economy and creating jobs.

As our economy continues its recovery from the problems of 2001 the employment picture in my home State of Ohio and across the nation does not seem to be improving accordingly, particularly in the manufacturing sector. In Ohio's Fifth Congressional District, which I represent, manufacturing is our second largest industry and the detrimental impact of its decline in recent years has been significant.

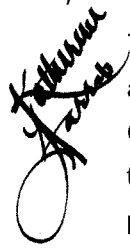
I look forward to hearing this issue addressed in your testimony and would welcome your comments on the future of our manufacturing base in this country if current problems persist. I would also ask for your recommendations, to the extent possible, on ways we here in Congress can address this situation and help create job growth in the manufacturing sector. Our unemployment rate has fallen from its peak of 6.3 percent last June to 5.7 percent in December and I look forward to seeing this trend spread throughout all sectors of our economy.

Thank you again, Chairman Greenspan, for joining us today and I look forward to your remarks.

February 11, 2004

**Federal Reserve Chairman Alan Greenspan
Semiannual Monetary Report to Congress**

Statement of Rep. Katherine Harris:

A handwritten signature in black ink, appearing to read "Katherine Harris", is positioned to the left of the first paragraph of text.

Thank you, Mr. Chairman, for holding this critical hearing. I also wish to express my appreciation to the distinguished Chairman of the Federal Reserve for the diligence and care that he routinely exercises in preparing his views for presentation to us, to the Nation, and to the world.

During recent months, we have witnessed encouraging signs that the economic recovery has at last begun to fire on all cylinders. Thanks to the Jobs and Growth package that Congress passed and the President signed last year, **GDP grew at a torrid rate of 8.2% during the 3rd quarter of 2003**, reflecting the best rate of economic expansion in nearly 20 years. The **4.0 %** by which GDP increased during the 4th quarter remained **well above the historic average of 3.3%** since John F. Kennedy was elected President in 1960.

Our nation's financial markets continue to reflect optimism about the economy. The value of U.S. stock markets has

increased by about 2 trillion dollars since the beginning of 2003.

Manufacturing statistics released in December showed that the rate of new orders, an indicator of future production, had **climbed to a level that our Nation has not experienced since Harry Truman was President more than one-half century ago.**

Most important, January witnessed the **best job growth in 3 years**, with the creation of **112,000 new jobs** and the reduction of the unemployment rate to a **2-year low of 5.6%.**

Nevertheless, job creation continues to lag behind expectations. Moreover, the federal budget deficit remains an increasing source of concern, although its size as a percentage of GDP remains smaller when compared to the deficits of the 1980s.

Mr. Chairman, I look forward to your analysis of the state and direction of our economy. In an election year that will produce a vigorous debate over the direction of fiscal policy, I am particularly interested in your comments on that matter.



Congresswoman

Carolyn Maloney**Reports***14th District • New York*

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For Immediate Release
 February 11, 2004

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**GREENSPAN BEFORE CONGRESS;
 SUBCOMMITTEE RANKING MEMBER MALONEY
 PANS ADMINISTRATION'S JOBS RECORD,
 CALLS BUDGET PROPOSAL "TOTAL FICTION"**

WASHINGTON, DC – Federal Reserve Chairman Alan Greenspan testified today at the House Financial Services Committee's Humphrey-Hawkins hearing. Rep. Carolyn Maloney (NY-14), Ranking Member on the Subcommittee on Domestic and International Monetary Policy, Trade and Technology, used her opening statement to pan the Administration's job creation record and the President's budget proposal. She delivered the following statement:

"Good morning Chairman Greenspan.

"As Americans watch the hearing today, their greatest economic concerns are the loss of 3 million private sector jobs and a record breaking \$521 billion deficit.

"Despite improvement in some economic statistics, including GDP growth, the economy continues to perform extraordinarily poorly for the many people without jobs and for the large number of people with jobs who aren't enjoying any wage growth.

"The Fed has done its part by putting its foot on the gas.

"The federal funds rate is effectively zero (one percent with one percent inflation), but we still have a net job loss of 2.2 million jobs, and President Bush is on track to be the first President since Herbert Hoover to end his term with fewer jobs than when he started.

"The President claims to have a plan for both the jobs crisis and the deficit.

"The Administration now says 2.6 million jobs will be created this year and that their budget will cut the deficit in half in five years.

"Yet, a year ago, the Administration estimated that nearly 2 million jobs would be created in the second half of 2003, and only 200,000 were produced. Even worse, the President's chief economist is now praising the outsourcing of U.S. jobs to foreign countries. Headlines across the country responded with astoundment this week reading "Bush Supports Shift of Jobs Overseas."

"On the spending side, the President's new budget is a total fiction.

"Already the claim that it will cut the deficit in half in five years has been panned by - Goldman Sachs, the Concord Coalition, the Committee for Economic Development and Decision Economics - all of whom continue to forecast \$500 billion deficits into the future.

"The Administration claims it will control spending by limiting domestic discretionary spending to under 1% this year - but domestic discretionary spending is only 15% of the entire budget - not enough to make a serious impact.

"The budget also totally misleads by leaving out spending we know is coming including:

- post-election funding for our troops in Afghanistan and Iraq;
- the long term cost of the President's number one domestic priority - making tax cuts permanent;
- the cost of fixing the Alternative Minimum Tax;
- the President's Mars space initiative, and more.

"Chairman Greenspan, I hope you will address the problems of the job deficit and budget deficit at length in your testimony today."

"Thank you."

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For release on delivery
11:00 a.m. EST
February 11, 2004

Statement of
Alan Greenspan
Chairman
Board of Governors of the Federal Reserve System
before the
Committee on Financial Services
U.S. House of Representatives

February 11, 2004

Mr. Chairman and members of the Committee, I am pleased to be here today to present the Federal Reserve's Monetary Policy Report to the Congress.

When I testified before this committee in July, I reported that conditions had become a good deal more supportive of economic expansion over the previous few months. A notable reduction in geopolitical concerns, strengthening confidence in economic prospects, and an improvement in financial conditions boded well for spending and production over the second half of the year. Still, convincing signs of a sustained acceleration in activity were not yet in evidence. Since then, the picture has brightened. The gross domestic product expanded vigorously over the second half of 2003 while productivity surged, prices remained stable, and financial conditions improved further. Overall, the economy has made impressive gains in output and real incomes; however, progress in creating jobs has been limited.

Looking forward, the prospects are good for sustained expansion of the U.S. economy. The household sector's financial condition is stronger, and the business sector has made substantial strides in bolstering balance sheets. Narrowing credit risk spreads and a considerable rally in equity prices have reduced financing costs and increased household wealth, which should provide substantial support for spending by businesses and households. With short-term real interest rates close to zero, monetary policy remains highly accommodative. And it appears that the impetus from fiscal policy will stay expansionary, on net, through this year. These circumstances all should spur the expansion of aggregate demand in 2004. At the same time, increases in efficiency and a significant level of underutilized resources should help keep a lid on inflation.

In retrospect, last year appears to have marked a transition from an extended period of subpar economic performance to one of more vigorous expansion. Once again, household

spending was the mainstay, with real personal consumption spending increasing nearly 4 percent and real outlays on residential structures rising about 10 percent. Last year's reductions in personal income tax rates and the advance of rebates to those households that were eligible for the expanded child tax credit boosted the growth of real disposable personal income. The very low level of interest rates also encouraged household spending through a variety of channels. Automakers took advantage of low interest rates to offer attractive incentive deals, buoying the purchase of new vehicles. The lowest home mortgage rates in decades were a major contributor to record sales of existing residences, engendering a large extraction of cash from home equity. A significant part of that cash supported personal consumption expenditures and home improvement. In addition, many households took out cash in the process of refinancing, often using the proceeds to substitute for higher-cost consumer debt. That refinancing also permitted some households to lower the monthly carrying costs for their homes and thus freed up funds for other expenditures. Not least, the low mortgage rates spurred sales and starts of new homes to very high levels.

These developments were reflected in household financing patterns. Home mortgage debt increased about 13 percent last year, while consumer credit expanded much more slowly. Even though the ratio of overall household debt to income continued to increase, as it has for more than a half-century, the rise in home and equity prices enabled the ratio of household net worth to disposable income to recover to a little above its long-term average. The low level of interest rates and large volume of mortgage refinancing activity helped reduce households' debt-service and financial-obligation ratios a bit. And many measures of consumer credit quality improved over the year, with delinquency rates on consumer loans and home mortgages declining.

A strengthening in capital spending over 2003 contributed importantly to the acceleration of real output. In the first quarter of the year, business fixed investment extended the downtrend that began in early 2001. Capital spending, however, ramped up considerably over the final three quarters of 2003, reflecting a pickup in expenditures for equipment and software. Outlays for high-tech equipment showed particular vigor last year. Even spending on communications equipment, which had been quite soft in the previous two years, accelerated. A growing confidence of business executives in the durability of the expansion, strong final sales, the desire to renew capital stocks after replacements had been postponed, and favorable financial conditions all contributed to the turnaround in equipment spending.

By contrast, expenditures on nonresidential structures continued to contract on balance, albeit less rapidly than in 2001 and 2002. High vacancy rates for office buildings and low rates of capacity utilization in manufacturing evidently limited the demand for new structures. Inventory investment likewise failed to pick up much momentum over the year, as managers remained cautious. Firms finished 2003 with lean inventories relative to sales, an encouraging sign for the expansion of production going forward.

To a considerable degree, the gathering strength of capital spending reflects a substantial improvement in the financial condition of businesses over the past few years. Firms' profits rose steeply during 2003 following smaller gains in the previous two years. The significantly stronger cash flow generated by profits and depreciation allowances was more than adequate to cover rising capital expenditures in the aggregate. As a result, businesses had little need to borrow during 2003. For the nonfinancial business sector as a whole, debt is estimated to have grown just 3-1/2 percent.

Firms encountered very receptive conditions in longer-term credit markets in 2003. Interest rate spreads on both investment-grade and speculative-grade bond issues narrowed substantially over the year, as investors apparently became more confident about the economic expansion and saw less risk of adverse shocks from accounting and other corporate scandals. Corporate treasurers took advantage of the attractive market conditions by issuing long-term debt to lengthen the maturities of corporate liabilities.

As a consequence, net short-term financing was extremely weak. The stock of business loans extended by banks and commercial paper issued by nonfinancial firms declined more than \$100 billion over the year, apparently owing to slack demand for short-term credit rather than to a constriction in supply. Interest-rate spreads on commercial paper, like those on corporate bonds, were quite narrow. And although a Federal Reserve survey indicates that banks had continued to tighten lending conditions early in the year, by the second half, terms and standards were being eased noticeably. Moreover, responses to that survey pointed to a lack of demand for business loans until late in the year.

Partly as a result of the balance-sheet restructuring, business credit quality appears to have recuperated considerably over the past few years. Last year, the default rate on bonds fell sharply, recovery rates on defaulted issues rose, the number of rating downgrades moderated substantially, and delinquencies on business loans continued to decline. The improved balance sheets and strong profits of business firms, together with attractive terms for financing in open markets and from banks, suggest that financial conditions remain quite supportive of further gains in capital spending in coming quarters.

The profitability of the business sector was again propelled by stunning increases in productivity. The advance in output per hour in the nonfarm business sector picked up to

5-1/4 percent in 2003 after unusually brisk gains in the previous two years. The productivity performance of the past few years has been particularly striking in that these increases occurred in a period of relatively sluggish output growth. The vigorous advance in efficiency represents a notable extension of the pickup that started around the mid-1990s. Apparently, businesses are still reaping the benefits of the marked acceleration in technology.

The strong gains in productivity, however, have obviated robust increases in business payrolls. To date, the expansion of employment has significantly lagged increases in output. Gross separations from employment, two-fifths of which have been involuntary, are about what would be expected from past cyclical experience, given the current pace of output growth. New hires and recalls from layoffs, however, are far below what historical experience indicates. To a surprising degree, firms seem able to continue identifying and implementing new efficiencies in their production processes and thus have found it possible so far to meet increasing orders without stepping up hiring.

In all likelihood, employment will begin to grow more quickly before long as output continues to expand. Productivity over the past few years has probably received a boost from the efforts of businesses to work off the stock of inefficiencies that had accumulated in the boom years. As those opportunities to enhance efficiency become scarcer and as managers become more confident in the durability of the expansion, firms will surely once again add to their payrolls.

A consequence of the rapid gains in productivity and slack in our labor and product markets has been sustained downward pressure on inflation. As measured by the chain-weighted price index for personal consumption expenditures excluding food and energy, prices rose less than 1 percent in 2003. Given the biases in such indexes, this performance puts measured

inflation in a range consistent with price stability—a statutory objective of the Federal Reserve and a key goal of all central banks because it is perceived as a prerequisite for maximum sustainable economic growth.

The recent performance of inflation has been especially notable in view of the substantial depreciation of the dollar in 2003. Against a broad basket of currencies of our trading partners, the foreign exchange value of the U.S. dollar has declined about 13 percent from its peak in early 2002. Ordinarily, currency depreciation is accompanied by a rise in dollar prices of imported goods and services, because foreign exporters endeavor to avoid experiencing price declines in their own currencies, which would otherwise result from the fall in the foreign exchange value of the dollar. Reflecting the swing from dollar appreciation to dollar depreciation, the dollar prices of goods and services imported into the United States have begun to rise after declining on balance for several years, but the turnaround to date has been mild. Apparently, foreign exporters have been willing to absorb some of the price decline measured in their own currencies and the consequent squeeze on profit margins it entails.

Part of exporters' losses, however, have apparently been offset by short forward positions against the dollar in foreign exchange markets. A marked increase in foreign exchange derivative trading, especially in dollar-euro, is consistent with significant hedging of exports to the United States and to other markets that use currencies tied to the U.S. dollar. However, most contracts are short-term because long-term hedging is expensive. Thus, although hedging may delay the adjustment, it cannot eliminate the consequences of exchange rate change. Accordingly, the currency depreciation that we have experienced of late should eventually help to contain our current account deficit as foreign producers export less to the United States. On

the other side of the ledger, the current account should improve as U.S. firms find the export market more receptive.

* * *

Although the prospects for the U.S. economy look quite favorable, we need to remind ourselves that all forecasts are projections into an uncertain future. The fact that most professional forecasters perceive much the same benign short-term outlook that is our most likely expectation provides scant comfort. When the future surprises, history tells us, it often surprises us all. We must, as a consequence, remain alert to risks that could threaten the sustainability of the expansion.

Besides the chronic concern about a sharp spike in oil or natural gas prices, a number of risks can be identified. Of particular importance to monetary policy makers is the possibility that our stance could become improperly calibrated to evolving economic developments. To be sure, the Federal Open Market Committee's current judgment is that its accommodative posture is appropriate to foster sustainable expansion of economic activity. But the evidence indicates clearly that such a policy stance will not be compatible indefinitely with price stability and sustainable growth; the real federal funds rate will eventually need to rise toward a more neutral level. However, with inflation very low and substantial slack in the economy, the Federal Reserve can be patient in removing its current policy accommodation.

In the process of assessing risk, we monitor a broad range of economic and financial indicators. Included in this group are a number of measures of liquidity and credit creation in the economy. By most standard measures, aggregate liquidity does not appear excessive. The monetary aggregate M2 expanded only 5-1/4 percent during 2003, somewhat less than nominal GDP, and actually contracted during the fourth quarter. The growth of nonfederal debt, at

7-3/4 percent, was relatively brisk in 2003. However, a significant portion of that growth was associated with the record turnover of existing homes and the high level of cash-out refinancing, which are not expected to continue at their recent pace. A narrower measure, that of credit held by banks, also grew only moderately in 2003. All told, our accommodative monetary policy stance to date does not seem to have generated excessive volumes of liquidity or credit.

That said, as we evaluate the risks to the economy, we also assess developments in financial markets. Broad measures of equity prices rose 25 percent in 2003, and technology stocks increased twice as quickly. The rally has extended into this year. And as I noted previously, credit spreads on corporate bonds have narrowed considerably, particularly for speculative-grade issues. This performance of financial markets importantly reflects investors' response to robust earnings growth and the repair of business balance sheets over the past few years. However, history shows that pricing financial assets appropriately in real time can be extremely difficult and that, even in a seemingly benign economic environment, risks remain.

The outlook for the federal budget deficit is another critical issue for policymakers in assessing our intermediate- and long-run growth prospects and the risks to those prospects. As you are well aware, after a brief period of unified budget surpluses around the beginning of this decade, the federal budget has reverted to deficits. The unified deficit swelled to \$375 billion in fiscal 2003 and appears to be widening considerably further in the current fiscal year. In part, these deficits are a result of the economic downturn and the period of slower growth that we recently experienced, as well as the earlier decline in equity prices. The deficits also reflect fiscal actions specifically intended to provide stimulus to the economy, a significant step-up in spending for national security, and a tendency toward diminished restraint on discretionary spending. Of course, as economic activity continues to expand, tax revenues should strengthen

and the deficit will tend to narrow, all else being equal. But even budget projections that attempt to take such business-cycle influences into account, such as those from the Congressional Budget Office and the Office of Management and Budget, indicate that very sizable deficits are in prospect in the years to come.

As I have noted before, the debate over budget priorities appears to be between those advocating additional tax cuts and those advocating increased spending. Although some stirrings in recent weeks in the Congress and elsewhere have been directed at actions that would lower forthcoming deficits, to date no effective constituency has offered programs to balance the budget. One critical element—present in the 1990s but now absent—is a framework of procedural rules to help fiscal policy makers make the difficult decisions that are required to forge a better fiscal balance.

The imbalance in the federal budgetary situation, unless addressed soon, will pose serious longer-term fiscal difficulties. Our demographics—especially the retirement of the baby-boom generation beginning in just a few years—mean that the ratio of workers to retirees will fall substantially. Without corrective action, this development will put substantial pressure on our ability in coming years to provide even minimal government services while maintaining entitlement benefits at their current level, without debilitating increases in tax rates. The longer we wait before addressing these imbalances, the more wrenching the fiscal adjustment ultimately will be.

The fiscal issues that we face pose long-term challenges, but federal budget deficits could cause difficulties even in the relatively near term. Long-term interest rates reflect not only the balance between the current demand for, and current supply of, credit, they also incorporate markets' expectations of those balances in the future. As a consequence, should investors

become significantly more doubtful that the Congress will take the necessary fiscal measures, an appreciable backup in long-term interest rates is possible as prospects for outsized federal demands on national saving become more apparent. Such a development could constrain investment and other interest-sensitive spending and thus undermine the private capital formation that is a key element in our economy's growth prospects.

Addressing the federal budget deficit is even more important in view of the widening U.S. current account deficit. In 2003, the current account deficit reached \$550 billion—about 5 percent of nominal GDP. The current account deficit and the federal budget deficit are related because the large federal dissaving represented by the budget deficit, together with relatively low rates of U.S. private saving, implies a need to attract saving from abroad to finance domestic private investment spending.

To date, the U.S. current account deficit has been financed with little difficulty. Although the foreign exchange value of the dollar has fallen over the past year, the decline generally has been gradual, and no material adverse side effects have been visible in U.S. capital markets. While demands for dollar-denominated assets by foreign private investors are off their record pace of mid-2003, such investors evidently continue to perceive the United States as an excellent place to invest, no doubt owing, in large part, to our vibrant market system and our economy's very strong productivity performance. Moreover, some governments have accumulated large amounts of dollar-denominated debt as a byproduct of resisting upward exchange rate adjustment.

Nonetheless, given the already-substantial accumulation of dollar-denominated debt, foreign investors, both private and official, may become less willing to absorb ever-growing claims on U.S. residents. Taking steps to increase our national saving through fiscal action to

lower federal budget deficits would help diminish the risks that a further reduction in the rate of purchase of dollar assets by foreign investors could severely crimp the business investment that is crucial for our long-term growth.

The large current account deficits and the associated substantial trade deficits pose another imperative—the need to maintain the degree of flexibility that has been so prominent a force for U.S. economic stability in recent years. The greatest current threat to that flexibility is protectionism, a danger that has become increasingly visible on today's landscape. Over the years, protected interests have often endeavored to stop in its tracks the process of unsettling economic change. Pitted against the powerful forces of market competition, virtually all such efforts have failed. The costs of any new protectionist initiatives, in the context of wide current account imbalances, could significantly erode the flexibility of the global economy. Consequently, creeping protectionism must be thwarted and reversed.

* * *

In summary, in recent years the U.S. economy has demonstrated considerable resilience to adversity. It has overcome significant shocks that, in the past, could have hobbled growth for a much longer period than they have in the current cycle. As I have noted previously, the U.S. economy has become far more flexible over the past two decades, and associated improvements have played a key role in lessening the effects of the recent adverse developments on our economy. Looking forward, the odds of sustained robust growth are good, although, as always, risks remain. The Congress can help foster sustainable expansion by taking steps to reduce federal budget deficits and thus contribute to national saving and by continuing to pursue opportunities to open markets and promote trade. For our part, the Federal Reserve intends to

use its monetary tools to promote our goals of economic growth and maximum employment of our resources in an environment of effective price stability.

**For use at 11:00 a.m., EST
Wednesday
February 11, 2004**

Board of Governors of the Federal Reserve System



Monetary Policy Report to the Congress

February 11, 2004

Board of Governors of the Federal Reserve System



Monetary Policy Report to the Congress
Submitted pursuant to section 2B of the Federal Reserve Act

February 11, 2004

Letter of Transmittal



BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM
Washington, D.C., February 11, 2004

THE PRESIDENT OF THE SENATE
THE SPEAKER OF THE HOUSE OF REPRESENTATIVES

The Board of Governors is pleased to submit its Monetary Policy Report to the Congress
pursuant to section 2B of the Federal Reserve Act.

Sincerely,

A handwritten signature in black ink, which appears to read "Alan Greenspan", is written over a horizontal line.

Alan Greenspan, Chairman

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Monetary Policy Report to the Congress

*Report submitted to the Congress on February 11, 2004,
pursuant to section 2B of the Federal Reserve Act*

MONETARY POLICY AND THE ECONOMIC OUTLOOK

The economic expansion in the United States gathered strength during 2003 while price inflation remained quite low. At the beginning of the year, uncertainties about the economic outlook and about the prospects of war in Iraq apparently weighed on spending decisions and extended the period of subpar economic performance that had begun more than two years earlier. However, with the support of stimulative monetary and fiscal policies, the nation's economy weathered that period of heightened uncertainty to post a marked acceleration in economic activity over the second half of 2003. Still, slack in resource utilization remained substantial, unit labor costs continued to decline as productivity surged, and core inflation moved lower. The performance of the economy last year further bolstered the case that the faster rate of increase in productivity, which began to emerge in the late 1990s, would persist. The combination of that favorable productivity trend and stimulative macroeconomic policies is likely to sustain robust economic expansion and low inflation in 2004.

At the time of our last *Monetary Policy Report to the Congress*, in July, near-term prospects for U.S. economic activity remained unclear. Although the Federal Open Market Committee (FOMC) believed that policy stimulus and rapid gains in productivity would eventually lead to a pickup in the pace of the expansion, the timing and extent of the improvement were uncertain. During the spring, the rally that occurred in equity markets when the war-related uncertainties lifted suggested that market participants viewed the economic outlook as generally positive. By then, the restraints imparted by the earlier sharp decline in equity prices, the retrenchment in capital spending, and lapses in corporate governance were receding. As the price of crude oil dropped back and consumer confidence rebounded last spring, household spending seemed to be rising once again at a moderate rate. Businesses, however, remained cautious; although the deterioration in the labor market showed signs of abating, private payroll employment was still declining, and capital spending continued to be weak. In addition, eco-

nomic activity abroad gave few signs of bouncing back, even though long-term interest rates in major foreign economies had declined sharply. At its June meeting, the FOMC provided additional policy accommodation, given that, as yet, it had seen no clear evidence of an acceleration of U.S. economic activity and faced the possibility that inflation might fall further from an already low level.

During the next several months, evidence was accumulating that the economy was strengthening. The improvement was initially most apparent in financial markets, where prospects for stronger economic activity and corporate earnings gave a further lift to equity prices. Interest rates rose as well, but financial conditions appeared to remain, on net, stimulative to spending, and additional impetus from the midyear changes in federal taxes was in train. Over the remainder of the year, in the absence of new shocks to economic activity and with gathering confidence in the durability of the economic expansion, the stimulus from monetary and fiscal policies showed through more readily in an improvement in domestic demand. Consumer spending and residential construction, which had provided solid support for the expansion over the preceding two years, rose more rapidly, and business investment revived. Spurred by the global recovery in the high-tech sector and by a pickup in economic activity abroad, U.S. exports also posted solid increases in the second half of the year. Businesses began to add to their payrolls, but only at a modest pace that implied additional sizable gains in productivity.

The fundamental factors underlying the strengthening of economic activity during the second half of 2003 should continue to promote brisk expansion in 2004. Monetary policy remains accommodative. Financial conditions for businesses are quite favorable: Profits have been rising rapidly, and corporate borrowing costs are at low levels. In the household sector, last year's rise in the value of equities and real estate exceeded the further accumulation of debt by enough to raise the ratio of household net worth to disposable income after three consecutive years of decline. In addition, federal spending and tax policies are slated to remain stimulative during the current fiscal year, while the restraint from the state and local sector should diminish. Lastly, the lower foreign exchange value of the dollar and a sustained economic expansion among our trading partners are likely to boost the demand for U.S. production. Considerable uncertainty, of course, still attends the economic outlook despite these generally

favorable fundamentals. In particular, questions remain as to how willing businesses will be to spend and hire and how durable will be the pickup in economic growth among our trading partners. At its meeting on January 27–28, 2004, the Committee perceived that upside and downside risks to the attainment of sustainable growth for the next few quarters are roughly equal.

Prospects for sustained high rates of increase in productivity are quite favorable. Businesses are likely to retain their focus on controlling costs and boosting efficiency by making organizational improvements and exploiting investments in new equipment. With the ongoing gains in productivity, the existing margins of slack in resource utilization should recede gradually, and any upward pressure on prices should remain well contained. The FOMC indicated at its January meeting that, with inflation low and resource use still slack, it can be patient in removing its policy accommodation.

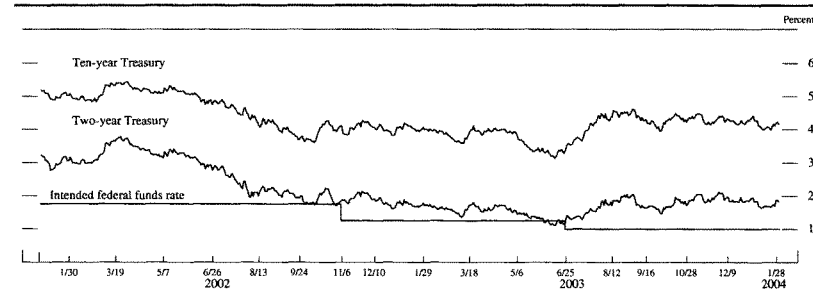
Monetary Policy, Financial Markets, and the Economy over 2003 and Early 2004

During the opening months of 2003, the softness in economic conditions was exacerbated by the substantial uncertainty surrounding the onset of war in Iraq. Private nonfarm businesses began again to cut payrolls substantially, consumer spending slowed, and business investment was muted. Although the jump in energy prices pushed up overall inflation, slack in resource utilization and the rapid rise in labor productivity pushed core inflation down. In financial markets, the heightened sense of caution among investors generated safe-haven demands for Treasury and other fixed-income securities, and equity prices declined.

At its meeting on March 18, the FOMC maintained its 1¼ percent target for the federal funds rate to provide support for a stronger economic expansion that appeared likely to materialize. The Committee noted that the prevailing high degree of geopolitical uncertainty complicated any assessment of prospects for the economy, and members refrained from making a determination about the balance of risks with regard to its goals of maximum employment and stable prices. At the same time, the Committee agreed to step up its surveillance of the economy, which took the form of a series of conference calls in late March and early April to consult about developments. When military action in Iraq became a certainty, financial markets began to rally, with risk spreads on corporate debt securities narrowing and broad equity indexes registering notable gains. Economic news, however, remained mixed.

Indicators of the economy at the time of the May 6 FOMC meeting continued to suggest only tepid growth. Uncertainty in financial markets had declined, and rising consumer confidence and a wave of mortgage refinancing appeared to be supporting consumer spending. However, persistent excess capacity evident in labor and product markets pointed to possible further disinflation. The lifting of some of the uncertainty clouding the economic outlook allowed the Committee to make the determination that the risks to economic growth were balanced but that the probability of an unwelcome substantial fall in inflation exceeded that of a pickup in inflation. The FOMC judged that, taken together, the balance of risks was weighted toward weakness. The Committee left the federal funds rate target at 1¼ percent, but the Committee's announcement prompted a rally in the Treasury market, and coupon yields fell substantially as market participants marked down their expectations for the path of the federal funds rate.

Selected interest rates



NOTE: The data are daily and extend through February 4, 2004. The dates on the horizontal axis are those of scheduled FOMC meetings.

By the time of the June 24–25 FOMC meeting, risk spreads had narrowed further and equity prices had extended their rise, but the prospects for sustained economic expansion still seemed tentative. Although Committee members referred to signs of improvement in some sectors of the economy, they saw no concrete evidence of an appreciable overall strengthening in the economic expansion and viewed the excess capacity in the economy as likely to keep inflation in check. The Committee lowered the target for the federal funds rate $\frac{1}{4}$ percentage point, to 1 percent, to add further support to the economic expansion and as a form of insurance against a further substantial drop in inflation, however unlikely. The members saw no serious obstacles to further conventional policy ease down to the zero lower bound on nominal interest rates should that prove to be necessary. The Committee also discussed alternative means of providing monetary stimulus should the target federal funds rate be reduced to a point at which they would have little or no latitude for additional easing through this traditional channel.

Longer-term interest rates backed up following the meeting, as investors had apparently placed substantial odds on a policy move larger than 25 basis points and may have been disappointed that the announcement failed to mention any potential “unconventional” monetary policy options. Ten-year Treasury yields rose sharply during the following weeks in reaction to interpretations of the Chairman’s congressional testimony, the release of Committee members’ economic projections, and positive incoming news about the economy and corporate profits. A substantial unwinding of hedging positions related to mortgage investments may well have amplified the upswing in market yields. Over the intermeeting period, labor markets continued to be soft, but industrial production, personal consumption expenditures, and business outlays all strengthened, and the housing market remained robust. By the time of the August 12 FOMC meeting, members generally perceived a firming in the economy, most encouragingly in business investment spending, and believed that, even after the rise in longer-term rates, financial conditions were still supportive of vigorous economic growth. Given the continued slack in resource use across the economy, however, members saw little risk of inducing higher inflation by leaving the federal funds rate at its accommodative level. On the basis of the economic outlook, and to reassure market participants that policy would not reverse course soon, Committee members decided to include in the announcement a reference to their judgment that under the anticipated circumstances, policy accommodation could be maintained for a “considerable period.”

Through the September 16 and October 28 FOMC meetings, the brightening prospects for future growth put

upward pressure on equity prices and longer-term interest rates. The Committee’s retention of the phrase “considerable period” in the announcements following each of these meetings apparently provided an anchor for near-term interest rates. The Committee’s discussion at these two meetings focused on the increased evidence of a broadly based acceleration in economic activity and on the continued weakness in labor markets. Rising industrial production, increased personal consumption and business investment spending, higher profits, receptive financial markets, and a lower foreign exchange value of the dollar all suggested that sustained and robust economic growth was in train. The Committee’s decision to leave the stance of monetary policy unchanged over this period reflected, in part, a continuing confidence that gains in productivity would support economic growth and suppress inflationary pressures. In fact, the Committee generally viewed its goal of price stability as essentially having been achieved.

By the time of the December 9 FOMC meeting, the economic expansion appeared likely to continue at a rate sufficient to begin to reduce slack in labor and product markets. Equity markets continued to rally, and risk spreads, particularly on the debt of speculative-grade firms, narrowed further. The labor market was finally showing some signs of improvement, and spending by households remained strong even as the impetus from earlier mortgage refinancings and tax cuts began to wane. The acceleration in capital spending and evidence that some firms were beginning to accumulate inventories seemed to signal that business confidence was on the mend. However, twelve-month core consumer price inflation was noticeably lower than in the previous year. Even though the unemployment rate was expected to move down gradually, continued slack in labor and product markets over the near term was viewed as sufficient to keep any nascent inflation subdued. Uncertainty about the pace at which slack would be worked down, however, made longer-run prospects for inflationary pressures difficult to gauge. Given the better outlook for sustained economic growth, the possibility of pernicious deflation associated with a pronounced softening in real activity was seen as even more remote than it had been earlier in the year. The Committee indicated that keeping policy accommodative for a considerable period was contingent on its expectation that inflation would remain low and that resource use would remain slack.

At its meeting on January 27–28, 2004, the Committee viewed a self-sustaining economic expansion as even more likely. Members drew particular reassurance from reports of plans for stronger capital spending and the widespread distribution of increased activity across regions. Accommodative financial market conditions, including higher equity prices, narrower risk spreads on

bonds, and eased standards on business loans, also seemed supportive of economic expansion. However, some risks remained in light of continued lackluster hiring evidenced by the surprisingly weak December payroll employment report. With the likelihood for rapid productivity growth seemingly more assured, Committee members generally agreed that inflation pressures showed no sign of increasing and that a bit more disinflation was possible. Under these circumstances, the Committee concluded that current conditions allowed monetary policy to remain patient. As to the degree of policy accommodation, the Committee left its target for the federal funds rate unchanged. The Committee's characterization that policy could be patient instead of its use of the phrase "considerable period" in its announcement prompted a rise in Treasury yields across the yield curve and a fall in equity prices.

Economic Projections for 2004

Federal Reserve policymakers expect that the economic expansion will continue at a brisk pace in 2004. The central tendency of the forecasts of the change in real gross domestic product made by the members of the Board of Governors and the Federal Reserve Bank presidents is 4½ percent to 5 percent, measured from the final quarter of 2003 to the final quarter of 2004. The full range of these forecasts is somewhat wider—from 4 percent to 5½ percent. The FOMC participants anticipate that the projected increase in real economic activity will be associated with a further gradual decline in the unemployment rate. They expect that the unemployment rate, which has averaged 5¼ percent in recent months, will be between 5¼ percent and 5½ percent in the fourth quarter of the year. With rapid increases in productivity likely to be sustained and inflation expectations stable, Federal Reserve policymakers anticipate that inflation will remain quite low this year. The central tendency of their forecasts for the change in the chain-type price index for per-

sonal consumption expenditures (PCE) is 1 percent to 1¼ percent; this measure of inflation was 1.4 percent over the four quarters of 2003.

ECONOMIC AND FINANCIAL DEVELOPMENTS IN 2003 AND EARLY 2004

The pace of economic expansion strengthened considerably in the second half of 2003 after almost two years of uneven and, on balance, sluggish growth. In early 2003, accommodative monetary policy and stimulative fiscal policies were in place, but economic activity still seemed to be weighed down by a number of factors that had restrained the recovery earlier: Geopolitical tensions were again heightened, this time by the impending war in Iraq, businesses remained unusually cautious about the strength of the expansion, and economic activity abroad was still weak. In June the continued lackluster economic growth and a further downshift in inflation from an already low level prompted a further reduction in the federal funds rate. In addition, the tax cuts that became effective at midyear provided a significant boost to disposable income. In the succeeding months, the macroeconomic stimulus began to show through clearly in sales and production, and some of the business caution seemed to recede. Real GDP increased at an annual rate of 6 percent, on average, in the third and fourth quarters of last year. In contrast, between late 2001 and mid-2003, real GDP had risen at an annual rate of only 2½ percent.

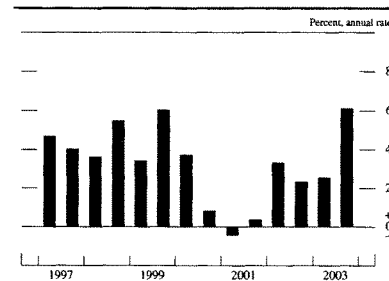
During the period of recession and subpar economic expansion, considerable slack developed in labor and product markets. The firming of economic activity in the second half of last year produced modest increases in rates of resource utilization. Sustained efforts by busi-

Economic projections for 2004
Percent

| Indicator | MEMO 2003 actual | Federal Reserve Governors and Reserve Bank presidents | |
|---|---------------------|---|---------------------|
| | | Range | Central tendency |
| <i>Change, fourth quarter to fourth quarter¹</i> | | | |
| Nominal GDP | 5.9 | 5¼–6½ | 5½–6¼ |
| Real GDP | 4.3 | 4–5½ | 4½–5 |
| PCE chain-type price index | 1.4 | 1–1½ | 1–1¼ |
| <i>Average level, fourth quarter</i> | | | |
| Civilian unemployment rate | 5.9 | 5¼–5½ | 5¼–5½ |

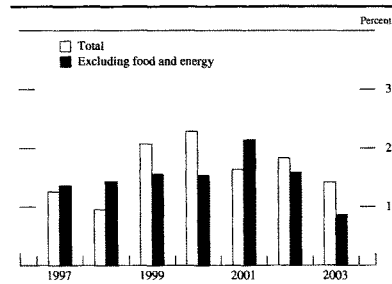
1. Change from average for fourth quarter of previous year to average for fourth quarter of year indicated.

Change in real GDP



NOTE: Here and in subsequent charts, except as noted, change for a given period is measured to its final quarter from the final quarter of the preceding period.

Change in PCE chain-type price index



NOTE: The data are for personal consumption expenditures (PCE).

nesses to control costs led to further rapid gains in productivity. As a result, unit labor costs declined, and core rates of inflation continued to slow in 2003; excluding food and energy, the PCE chain-type price index increased just 0.9 percent last year. Measures of overall inflation, which were boosted by movements in food and energy prices, were higher than those for core inflation.

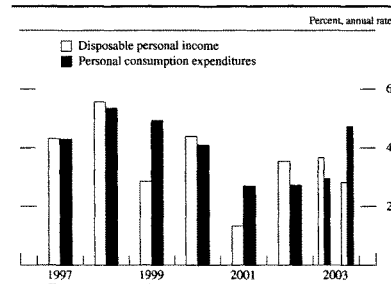
Domestic financial market conditions appeared to become increasingly supportive of economic growth last year. The economic expansion lowered investors' perception of, and perhaps aversion to, risk, and continued disinflation was interpreted as a sign that monetary policy would remain on hold, even as the economy picked up steam. Although yields on Treasury coupon securities rose modestly on balance over the year, risk spreads on corporate debt narrowed to the point that yields on corporate issues declined. The low-interest-rate environment spurred considerable corporate bond issuance and generated a massive wave of mortgage refinancing activity by households. Equity markets began to rally when the uncertainty over the timing of military intervention in Iraq was resolved. The climb in stock prices continued for the rest of the year, driven by improving corporate earnings reports and growing optimism about the prospects for the economy. At the same time, with economic conditions abroad improving and with concerns about the financing burden of the U.S. current account deficit gaining increased attention in financial markets, the dollar fell appreciably on a trade-weighted basis.

The Household Sector

Consumer Spending

Early in 2003, consumer spending was still rising at about the same moderate pace as in 2001 and 2002. In the late

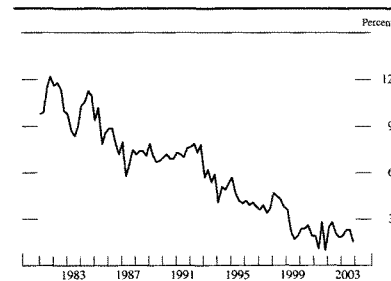
Change in real income and consumption



spring and in the summer, however, households stepped up their spending sharply. As a result, in the second half of last year, real personal consumption expenditures rose at an annual rate of 4¾ percent after having increased at a rate of just under 3 percent in the first half. Although wage and salary earnings rose slowly during most of the year, the midyear reductions in tax rates and the advance of rebates to households eligible for child tax credits provided a substantial boost to after-tax income. In 2003, real disposable personal income increased 3¼ percent, after having risen 3½ percent in 2002. Low interest rates provided additional impetus to household spending by reducing borrowing costs for new purchases of houses and durable goods; they also indirectly stimulated spending by facilitating an enormous amount of mortgage refinancing.

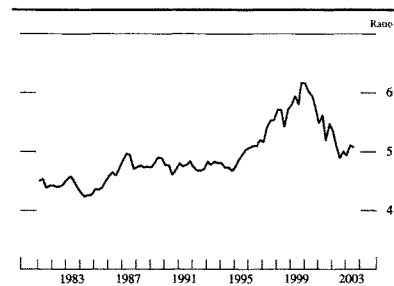
The personal saving rate has fluctuated within a fairly narrow range around 2 percent over the past three years. Although households continued to see the value of their

Personal saving rate



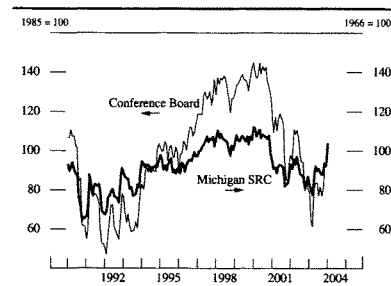
NOTE: The data are quarterly and extend through 2003:Q4.

Wealth-to-income ratio



NOTE: The data are quarterly and extend through 2003:Q3. The wealth-to-income ratio is the ratio of household net worth to disposable personal income.

Consumer sentiment



NOTE: The data are monthly and extend through January 2004.
SOURCE: University of Michigan Survey Research Center and The Conference Board.

homes appreciate over this period, they also were adjusting to the substantial drop in equity wealth that occurred after the peak in the stock market in 2000. By itself, a fall in the ratio of household wealth to income of the magnitude that households experienced between 2000 and 2002 might have triggered a noticeable increase in the personal saving rate. However, in this case, the tendency for households to save more as their wealth declines appears to have been tempered in part by their willingness to take advantage of the attractive pricing and financing environment for consumer goods.

Real consumer expenditures for durable goods surged more than 11 percent in 2003. Sales of new motor vehicles remained brisk as many consumers responded to the low financing rates and various incentive deals that manufacturers offered throughout the year. Falling prices also made electronic equipment attractive to consumers, and spending on home furnishings likely received a boost from the strength of home sales. Altogether, real outlays for furniture and household equipment jumped 13½ percent in 2003.

In contrast, real consumer expenditures on nondurable goods and on services continued to rise at a moderate pace, on balance, last year. Outlays for food and apparel increased a bit faster than in 2002, and the steady uptrend in spending for medical services was well maintained. However, consumers responded to the higher cost of energy by cutting back their real spending on gasoline, fuel oil, and natural gas and electricity services.

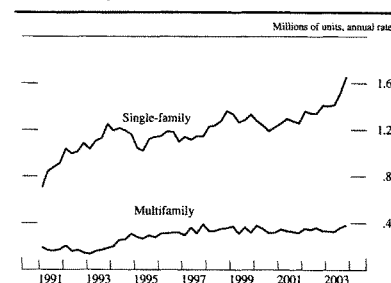
Consumer confidence was shaken temporarily early in 2003 by concerns about the consequences of a war in Iraq, but it snapped back in the spring. Toward year-end, sentiment appeared to brighten more as households saw their current financial conditions improve and gained confidence that business conditions would be better during

the year ahead. Those positive views became more widely held in January, and the index of consumer sentiment prepared by the Michigan Survey Research Center (SRC) reached its highest level in three years.

Residential Investment

Housing activity was robust for a second consecutive year in 2003. After having risen 7 percent in 2002, real expenditures on residential construction jumped more than 10 percent in 2003. These gains were fueled importantly by the lowest levels of mortgage interest rates in more than forty years, which, according to the Michigan SRC's survey of consumer sentiment, buoyed consumer attitudes toward homebuying throughout the year. The average rate on thirty-year fixed-rate mortgages dropped

Private housing starts



NOTE: The data are quarterly and extend through 2003:Q4.

sharply during the first half of 2003 and reached a low of 5¼ percent in June. Although the thirty-year rate subsequently firmed somewhat, it remained below 6 percent, on average, in the second half of last year.

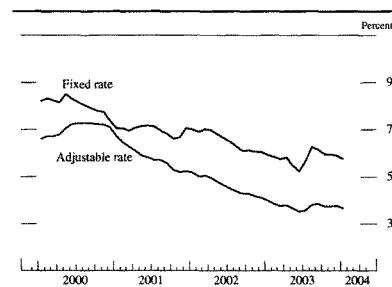
Construction of new single-family homes accelerated during 2003, and for the year as a whole, starts averaged 1.5 million units, an increase of 10 percent compared with the level in 2002. Sales of both new and existing single-family homes also picked up sharply further last year. The brisk demand for homes was accompanied by rapid increases in the average price paid for them. The average price paid for new homes rose 10 percent over the four quarters of 2003, and the average price of existing homes was up 7¾ percent over the same period. However, house price inflation was lower after adjusting for shifts in the composition of transactions toward more expensive homes. The constant-quality price index for new homes, which eliminates the influence of changes in their amenities and their geographic distribution, increased 4¾ percent over the four quarters of 2003—down from an increase of 6 percent during 2002. The year-over-year increase in Freddie Mac's index of the prices paid in repeat sales of existing homes stood at 5½ percent as of the third quarter of 2003, compared with a rise of 7¼ percent as of the third quarter of 2002.

Starts in the multifamily sector totaled 350,000 units in 2003, a pace little changed from that of the past several years. Vacancy rates for these units rose and rents fell during the year, but falling mortgage rates apparently helped to maintain building activity.

Household Finance

Household debt increased 10 ¾ percent last year, in large part because of the surge in mortgage borrowing induced by record-low mortgage interest rates. Refinancing activity was torrid in the first half of the year, as mortgage rates declined. Some of the equity that households extracted from their homes during refinancings was apparently used to fund home improvements and to pay down higher-interest consumer debt. When mortgage rates rebounded in the second half of the year, mortgage borrowing slowed from the extremely rapid clip of the first half, but it remained brisk through year-end. Consumer credit increased at a pace of 5¼ percent in 2003, a little faster than a year earlier, as revolving credit picked up somewhat from the slow rise recorded in 2002. Despite the pickup in household borrowing, low interest rates kept the household debt-service and financial-obligation ratios—which gauge pre-committed expenditures relative to disposable income—at roughly the levels posted in 2002. Most measures of delinquencies on consumer loans and home mortgages changed little on net last year, and

Mortgage rates

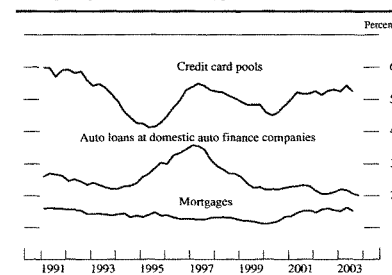


NOTE: The data, which are monthly and extend through January 2004, are contract rates on thirty-year mortgages.
SOURCE: Federal Home Loan Mortgage Corporation.

household bankruptcies held roughly steady near their elevated level in 2002.

Even with the rapid expansion in debt, net worth of the household sector increased as the value of household assets rose noticeably. Stock prices were boosted by the rise in corporate earnings and the ebbing of uncertainty about future economic growth. Households directed substantial flows into stock mutual funds in the third and fourth quarters despite highly publicized scandals in the mutual fund industry. Although the companies directly implicated in wrongdoing experienced heavy outflows from their funds, most of these withdrawals apparently were transferred to other mutual funds with little effect on the industry as a whole. A considerable rise in real estate wealth further augmented household assets. Although prices of existing homes climbed more slowly

Delinquency rates on selected types of household loans



NOTE: The data are quarterly. The rates for credit card pools and mortgages extend through 2003:Q3; the rate for auto loans extends through 2003:Q4.
SOURCE: For mortgages, the Mortgage Bankers Association; for auto loans, the Big Three automakers; for credit cards, Moody's Investors Service.

than they had in the previous year, the rate of increase remained sizable. Overall, the advance in the value of household assets outstripped the accumulation of household debt by enough to boost the ratio of net worth to disposable income over the year.

The Business Sector

Fixed Investment

Business spending on equipment and software was still sluggish at the beginning of 2003. However, it accelerated noticeably over the course of the year as profits and cash flow rebounded and as businesses gained confidence in the strength of the economic expansion and in the prospective payoffs from new investment. At the same time, business financing conditions were very favorable: Interest rates remained low, equity values rallied, and the enhanced partial-expensing tax provision gave a special incentive for the purchase of new equipment and software. After having changed little in the first quarter of the year, real outlays for equipment and software increased

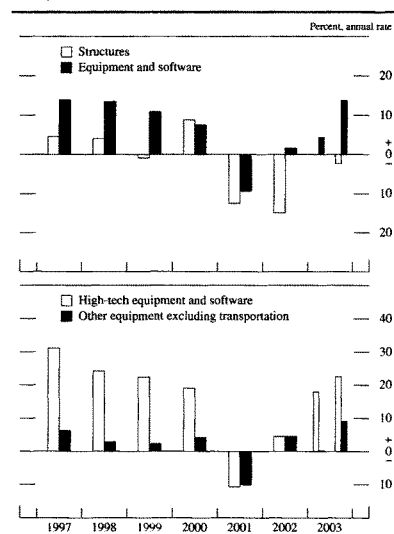
at an annual rate of 11¼ percent over the remaining three quarters of the year.

Outlays for high-technology items—computers and peripherals, software, and communications equipment—which had risen a moderate 4½ percent in 2002, posted a significantly more robust increase of more than 20 percent in 2003. That gain contributed importantly to the pickup in overall business outlays for equipment and software and pushed the level of real high-tech outlays above the previous peak at the end of 2000. The increase in spending last year on computing equipment marked the sharpest gain since 1998, and investment in communications equipment, which had continued to contract in 2002 after having plummeted a year earlier, turned up markedly.

In contrast, the recovery in spending on non-high-tech equipment was, on balance, more muted, in part because outlays for transportation equipment continued to fall. The prolonged slump in business purchases of new aircraft continued in 2003 as domestic air carriers grappled with overcapacity and high fixed costs. By the fourth quarter, real outlays for aircraft had dropped to their lowest level in ten years. In the market for heavy (class 8) trucks, sales were quite slow in early 2003 when businesses were concerned about the performance of models with engines that met new emission standards. But as potential buyers overcame those concerns, sales recovered. By the fourth quarter of 2003, sales of medium and heavy trucks had moved noticeably above the slow pace of 2001 and 2002. Apart from outlays for transportation equipment, investment in other types of non-high-tech equipment was, on balance, little changed during the first half of the year. Demand was strong for medical equipment, instruments, and mining and oilfield machinery, but sales of industrial equipment and farm and construction machinery were sluggish. In the second half of the year, however, the firming in business spending for non-high-tech items became more broadly based.

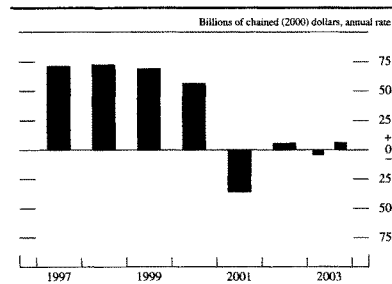
The steep downturn in nonresidential construction that began in 2001 moderated noticeably in 2003, although market conditions generally remained weak. After having contracted at an average annual rate of 13½ percent during 2001 and 2002, real expenditures for nonresidential construction slipped just 1¼ percent, on balance, during 2003. Spending on office buildings and manufacturing structures, which had dropped sharply over the preceding two years, fell again in 2003. The high office vacancy rates in many areas and low rates of factory utilization implied little need for new construction in these sectors even as economic activity firmed. Investment in communications infrastructure, where a glut of long-haul fiber-optic cable had developed earlier, also continued to shrink. In contrast, outlays for retail facilities, such as department stores and shopping malls, turned up last year,

Change in real business fixed investment



NOTE: High-tech equipment consists of computers and peripheral equipment, software, and communications equipment.

Change in real business inventories



and the retrenchment in construction of new hotels and motels ended. In addition, investment in drilling and mining structures, which is strongly influenced by the price levels for crude oil and natural gas, increased noticeably in 2003.

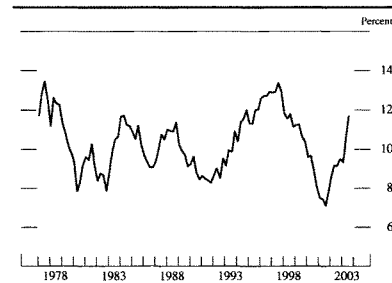
Inventory Investment

During 2002, businesses appeared to have addressed most of the inventory imbalances that had developed a year earlier. But the moderate pace of final demand during the first half of 2003 apparently restrained firms from embarking on a new round of inventory accumulation. Even though final sales picked up in the second half of the year, the restraint seemed to recede only gradually. Over the first three quarters of 2003, nonfarm businesses trimmed their inventories at an average annual rate of \$2¼ billion in constant-dollar terms, and the preliminary estimate for the final quarter of the year indicated only modest restocking. As a result, most firms appear to have ended the year with their inventories quite lean relative to sales, even after taking into account the downward trend in inventory-sales ratios that has accompanied the ongoing shift to improved inventory management. Motor vehicle dealers were an exception; their days' supply of new vehicles moved higher on average for a second year in a row.

Corporate Profits and Business Finance

Higher profits allowed many firms to finance capital spending with internal funds, and business debt rose only slightly faster than the depressed rate in 2002. Moreover, a paucity of cash-financed merger and acquisition activ-

Before-tax profits of nonfinancial corporations as a percent of sector GDP

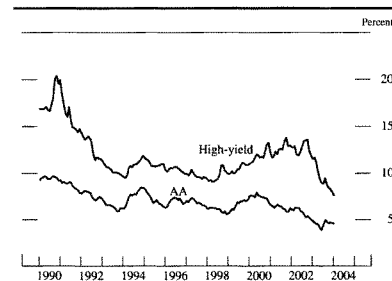


NOTE: The data are quarterly and extend through 2003:Q3. Profits are from domestic operations of nonfinancial corporations, with inventory valuation and capital consumption adjustments.

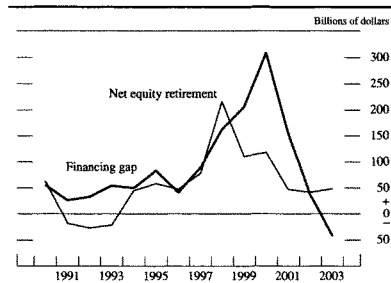
ity further limited the need to issue debt. Gross equity issuance was extremely weak in the first half of the year but perked up in the latter half in response to the rally in equity prices. Nevertheless, for the year as a whole, firms extinguished more equity than they issued.

The pace of gross corporate bond issuance was moderate at the start of the year but shot up in late spring as firms took advantage of low bond yields to pay down short-term debt, to refund existing long-term debt, and to raise cash in anticipation of future spending. Bond issuance by investment-grade firms slowed after midyear as firms accumulated a substantial cushion of liquid assets and as interest rates on higher-quality debt backed up. However, issuance by speculative-grade firms continued

Corporate bond yields



NOTE: The data are monthly averages and extend through January 2004. The AA rate is calculated from bonds in the Merrill Lynch AA index with a remaining maturity of seven to ten years. The high-yield rate is the yield on the Merrill Lynch 175 high-yield index.

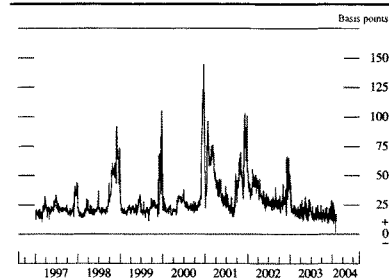
Financing gap and net equity retirement
at nonfinancial corporations

NOTE: The data are annual; 2003 is based on partially estimated data. The financing gap is the difference between capital expenditures and internally generated funds. Net equity retirement is the difference between equity retired through share repurchases, domestic cash-financed mergers, or foreign takeovers of U.S. firms and equity issued in public or private markets, including funds invested by venture capital partnerships.

apace, with the yields on their debt continuing to decline dramatically presumably because of investors' increased optimism about the economic outlook and greater willingness to take on risk. The sum of bank loans and commercial paper outstanding, which represent the major components of short-term business debt, contracted throughout the year. In large part, this decline reflected ongoing substitution toward bond financing, but it also was driven by the softness of fixed investment early in the year and the liquidation of inventories over much of the year.

Respondents to the Senior Loan Officer Opinion Survey on Bank Lending Practices noted that terms and stan-

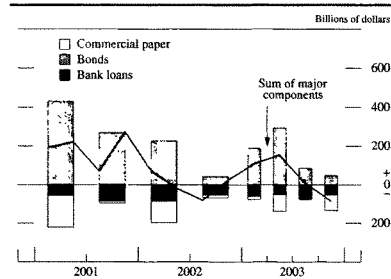
Spread of low-tier CP rates over high-tier CP rates



NOTE: The data are daily and extend through February 4, 2004. The series shown is the difference between the rate on A2/P2 nonfinancial commercial paper and the AA rate.

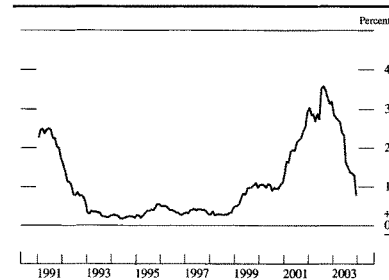
dards on business loans were tightened during the first half of the year but that both had been eased considerably by year-end. They also reported that demand for business loans was quite weak for much of the year. However, despite the fact that outstanding levels of business loans continued to decline, survey responses in the last quarter of the year indicated that demand for loans had begun to stabilize. Many banks cited customers' increased investment and inventory spending as factors helping to generate the increase in loan demand toward the end of the year. The apparent divergence between survey responses and data on actual loan volumes may suggest that demand for lines of credit has increased but that these lines have not yet been drawn. In other short-term

Major components of net business financing



NOTE: Seasonally adjusted annual rate for nonfinancial corporate business. The data for the sum of major components are quarterly. The data for 2003:Q4 are estimated.

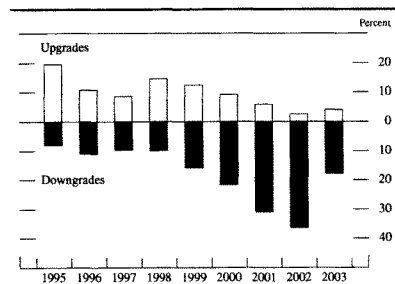
Default rate on outstanding bonds



NOTE: The default rate is monthly and extends through December 2003. The rate for a given month is the face value of bonds that defaulted in the twelve months ending in that month divided by the face value of all bonds outstanding at the end of the calendar quarter immediately preceding the twelve-month period.

SOURCE: Moody's Investors Service.

Ratings changes of nonfinancial corporate bonds



NOTE: For a given year, the percentage is calculated as the par value of bonds that were upgraded or downgraded in that year and outstanding in the fourth quarter of the previous year divided by the par value of the outstanding bonds of all nonfinancial corporations in that quarter.

SOURCE: Moody's Investors Service.

financing developments, nonfinancial firms that issued commercial paper in 2003 found a very receptive market, in large part because of the scarcity of outstanding issues. Many of the riskiest borrowers had exited the market in 2002, and remaining issuers improved their attractiveness to investors by continuing to restructure their balance sheets.

Gross equity issuance rose over the course of 2003 as the economic outlook strengthened and stock prices moved higher. The market for initial public offerings continued to languish in the first half of the year but showed signs of life by the end of the summer. The volume of seasoned offerings also picked up in the second half of the year. On the other side of the ledger, merger and acquisition activity again extinguished shares in 2003,

although only at a subdued pace. In addition, firms continued to retire a considerable volume of equity through share repurchases. For the year as a whole, net equity issuance was negative.

Corporate credit quality improved, on balance, over the year. Notably, the default rate on corporate bonds declined sharply, delinquency rates on commercial and industrial (C&I) loans at commercial banks turned down, and the pace of bond-rating downgrades slowed considerably. Low interest rates and the resulting restructuring of debt obligations toward longer terms also importantly contributed to improved business credit quality. Bank loan officers noted that the aggressive tightening of lending standards in earlier years was an important factor accounting for the lower delinquency and charge-off rates in recent quarters.

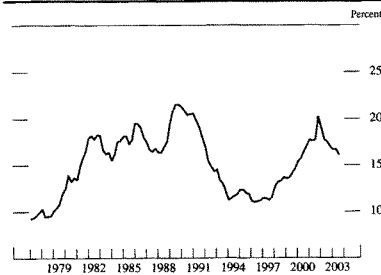
Commercial mortgage debt increased noticeably during most of 2003 despite persistently high vacancy rates, falling rents, and sluggish growth in construction expenditures. Low interest rates on this type of collateralized debt may have induced some corporate borrowers to tap the market to pay down more-costly unsecured debt. Delinquency rates on commercial mortgages generally remained low throughout 2003, and risk spreads were relatively narrow. Loan performance has held up well because of low carrying costs for property owners and because the outstanding loans generally had been structured to include a sizable equity contribution, which makes default less attractive to borrowers.

The Government Sector

Federal Government

The federal budget deficit continued to widen in fiscal year 2003 as a result of the slow increase in nominal

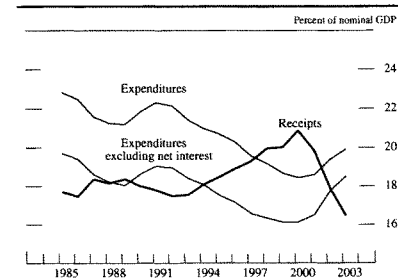
Net interest payments of nonfinancial corporations as a percent of cash flow



NOTE: The data are quarterly and extend through 2003:Q3.

SOURCE: Bureau of Economic Analysis.

Federal receipts and expenditures



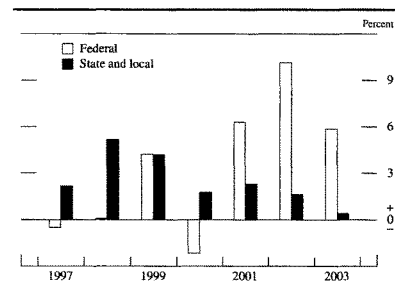
NOTE: The budget data are from the unified budget and are for fiscal years (October through September); GDP is for the year ending in Q3.

incomes, outlays associated with the war in Iraq, and legislative actions that reduced taxes and boosted spending. The deficit in the unified budget totaled \$375 billion, up substantially from the deficit of \$158 billion recorded in fiscal 2002. The Congressional Budget Office is projecting that the unified federal deficit will increase further in fiscal 2004, to more than \$475 billion.

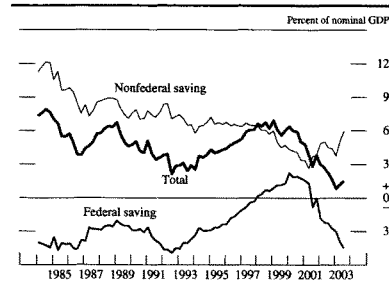
Federal receipts have fallen in each of the past three years; the drop of nearly 4 percent in fiscal 2003 brought the ratio of receipts to GDP to 16½ percent, 2 percentage points below the average for the past thirty years. About half of the decrease in receipts last year was a consequence of legislation that shifted due dates for corporate payments between fiscal years. In addition, personal income tax collections dropped sharply because of the slow rise in nominal wages and salaries, diminished capital gains realizations in 2002, and the tax cuts enacted under the Jobs and Growth Tax Relief Reconciliation Act of 2003. The act advanced refund checks to households eligible for the 2003 increment to the child tax credit and resulted in lower withholding schedules for individual taxpayers. The act also expanded the partial-expensing incentive for businesses, but because corporate profits accelerated sharply last year, corporate tax receipts rose appreciably after adjusting for the shifts in the timing of payments.

At the same time, federal outlays other than for interest expense rose rapidly for the second consecutive year in fiscal 2003; these outlays increased about 9 percent after having risen 11 percent in fiscal 2002. Spurred by operations in Iraq, defense spending soared again, and outlays for homeland security rose further. Spending for income support, such as unemployment insurance, food stamps, and child credits under the earned income tax credit program, also posted a sizable increase. The ongoing rise in the cost and utilization of medical services

Change in real government expenditures on consumption and investment



Net national saving



NOTE: The data are quarterly and extend through 2003:Q3. Nonfederal saving is the sum of personal and net business saving and the net saving of state and local governments.

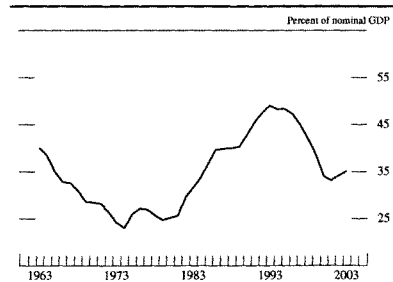
continued to push up spending for Medicare and Medicaid. Overall, real federal consumption and investment (the measure of federal spending that is included in real GDP) increased 6 percent over the four quarters of 2003, after having risen 10 percent a year earlier.

The federal government had contributed increasingly to national saving in the late 1990s and 2000 as budget deficits gave way to accumulating surpluses. However, with the swing back to large deficits in recent years, the federal government has again become a drain on national saving. Using the accounting practices followed in the national income and product accounts (NIPA), gross federal saving as a percent of GDP dropped sharply in late 2001 and has trended down since then; the drop contributed to a decline in overall gross national saving as a percent of GDP from 18 percent in calendar year 2000 to 13 percent, on average, in the first three quarters of 2003. Federal saving net of estimated depreciation fell from its recent peak of 2½ percent of GDP in 2000 to negative 4 percent of GDP, on average, in the first three quarters of 2003. As a result, despite a noticeable pickup in saving from domestic nonfederal sources, overall net national saving, which is an important determinant of private capital formation, fell to less than 1½ percent of GDP, on average, in the first three quarters of 2003, compared with a recent high of 6½ percent of GDP in 1998.

Federal Borrowing

The Treasury ramped up borrowing in 2003 in response to the sharply widening federal budget deficit, and federal debt held by the public as a percent of nominal GDP increased for a second year in a row after having trended down over the previous decade. As had been the case in

Federal government debt held by the public



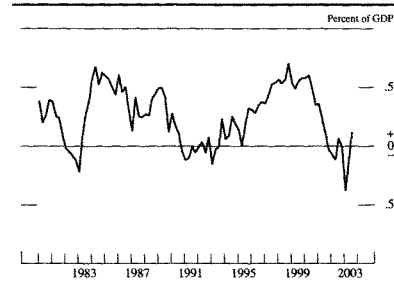
NOTE: Through 2002, the data for debt are year-end figures, and the corresponding value for GDP is for Q4 at an annual rate; the final observation is for 2003:Q3. Excludes securities held as investments of federal government accounts.

2002, the Treasury was forced to resort temporarily to accounting devices in the spring of 2003 when the statutory debt ceiling became a constraint, but debt markets were not disrupted noticeably. In May, the Congress raised the debt ceiling from \$6.4 trillion to \$7.4 trillion. With large deficits expected to persist, the Treasury made a number of adjustments to its regular borrowing program, including reintroducing the three-year note, increasing to monthly the frequency of five-year note auctions, reopening the ten-year note in the month following each new quarterly offering, and adding another auction of ten-year inflation-indexed debt. As a result of these changes, the average maturity of outstanding Treasury debt, which had reached its lowest level in decades, began to rise in the latter half of 2003.

State and Local Governments

State and local governments faced another difficult year in 2003. Tax receipts on income and sales continued to be restrained by the subdued performance of the economy. Despite further efforts to rein in spending, the sector's aggregate net saving, as measured in the NIPA, reached a low of negative \$40 billion (at an annual rate), or negative 0.4 percent of GDP, in the first quarter of the year. Most of these jurisdictions are subject to balanced-budget requirements and other rules that require them to respond to fiscal imbalances. Thus, in addition to reducing operating expenses, governments drew on reserves, issued bonds, sold assets, and made various one-time adjustments in the timing of payments to balance their books. In recent years, many have also increased taxes and fees, thereby reversing the trend toward lower taxes that prevailed during the late 1990s.

State and local government net saving



NOTE: The data, which are quarterly, are on a national income and product account basis and extend through 2003:Q3.

Recent indications are that the fiscal stress in this sector is beginning to ease. The improvement reflects a noticeable upturn in tax collections in recent quarters while restraint on operating expenditures largely remains in place. On a NIPA basis, real spending on compensation and on goods and services purchased by state and local governments was little changed in the second half of 2003, as it was over the preceding year. However, investment in infrastructure, most of which is funded in the capital markets, accelerated in the second half of 2003. As of the third quarter of 2003, state and local net saving had moved back into positive territory.

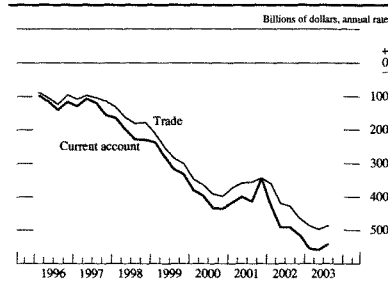
State and Local Government Borrowing

Gross issuance of debt by state and local governments was quite robust last year. Weak tax receipts from a sluggish economy, significant demands for infrastructure spending, and low interest rates all contributed to the heavy pace of borrowing. Borrowing was strongest in the second quarter of the year, as governments took advantage of the extraordinarily low longer-term rates to fund capital expenditures and to advance refund existing higher-cost debt. Because of the financial stresses facing these governments, the credit ratings of several states, most notably California, were lowered last year. Although bond downgrades outnumbered upgrades for the sector as a whole, the imbalance between the two was smaller than it was in 2002.

The External Sector

Over the first three quarters of 2003, the U.S. current account deficit widened relative to the comparable

U.S. trade and current account balances



NOTE: The data are quarterly and extend through 2003:Q3.

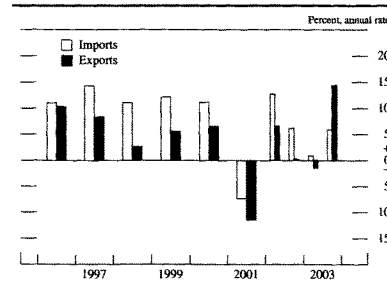
period in 2002, a move largely reflecting developments in the deficit on trade in goods and services. Net investment income rose over the same period, as receipts from abroad increased and payments to foreign investors in the United States declined.

International Trade

The trade deficit widened considerably in the first half of 2003 but narrowed slightly in the third quarter, as the value of exports rebounded in response to strengthening foreign economic activity and the depreciation of the dollar. Available trade data through November suggest that the trade deficit narrowed further in the fourth quarter, as an additional strong increase in exports outweighed an increase in imports.

Real exports of goods and services increased about 6 percent in 2003. Exports of services rose about 5 percent. They were held down early in the year by a drop in receipts from foreign travelers, owing to the effects of the SARS (severe acute respiratory syndrome) epidemic and the war in Iraq; services exports rebounded strongly later in the year as those concerns receded. Exports of goods rose about 6½ percent over the course of the year—considerably faster than in 2002. Exports increased in all major end-use categories of trade, with particularly strong gains in capital goods and consumer goods. Reflecting the global recovery in the high-tech sector, exports of computers and semiconductors picked up markedly in 2003, particularly in the second half. By geographic area, exports of goods increased to Western Europe, Canada, and, particularly, to developing countries in East Asia—a region where economic activity expanded at a rapid pace last year. Prices of exported goods rose in 2003, with prices of agricultural exports recording particularly

Change in real imports and exports of goods and services

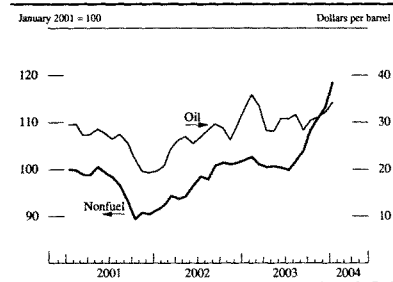


large increases. In response to poor crops and strong demand, prices for cotton and soybeans increased sharply. For beef, disruptions in supply led to notably higher prices through much of 2003. Beef prices, however, fell back in late December after a case of mad cow disease was discovered in the state of Washington and most countries imposed bans on beef imports from the United States.

Real imports of goods and services fell in the first half of the year but bounced back in the second half, as concerns about the SARS epidemic and the war in Iraq came and went; for the year as a whole, real imports of services were about unchanged from the previous year. Real imports of goods expanded about 4 percent in response to the strengthening of U.S. demand, but the pattern was choppy, with large gains in the second and fourth quarters partially offset by declines in the first and third. Despite a surge in the second quarter, the volume of oil imports increased modestly, on balance, over the course of the year. Real non-oil imports were up about 4½ percent, with the largest increases in capital goods and consumer goods. Imports of computers posted solid gains, whereas imports of semiconductors were flat.

Despite a substantial decline in the value of the dollar, the prices of imported non-oil goods rose only moderately in 2003. By category, the prices of consumer goods were unchanged last year, and prices of capital goods excluding aircraft, computers, and semiconductors increased only a little more than 1 percent. Price increases were larger for industrial supplies. The price of imported natural gas spiked in March and rose again late in the year; these fluctuations were large enough to show through to the overall price index for imported goods. At year-end, prices of industrial metals rose sharply, with the spot price of copper reaching the highest level in six and one-half years. The strength in metals and other commodity prices has been attributed, at least in part, to depreciation

Prices of oil and of nonfuel commodities



NOTE: The data are monthly and extend through January 2004. The oil price is the spot price of West Texas intermediate crude oil. The price of nonfuel commodities is a weighted average of thirty-nine primary-commodity prices from the International Monetary Fund.

of the dollar and strong global demand, particularly from China.

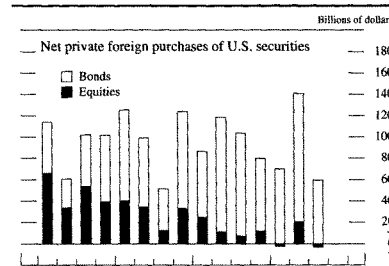
In 2003, the spot price of West Texas intermediate (WTI) crude oil averaged more than \$31 per barrel—the highest annual average since the early 1980s. The spot price of oil began to rise at the end of 2002 when ethnic unrest in Nigeria and a nationwide strike in Venezuela sharply limited oil supplies from those two countries. In the first quarter of 2003, geopolitical uncertainty in the period leading up to the war in Iraq also added upward pressure on oil prices. On March 12, the spot price of WTI closed at \$37.83 per barrel, the highest level since the Gulf War in 1990. When the main Iraqi oil fields had been secured and it became apparent that the risks to oil supplies had subsided, the spot price of WTI fell sharply to a low of \$25.23 per barrel on April 29. However, oil prices began rising again when, because of difficult

security conditions, the recovery of oil exports from Iraq was slower than expected. Prices also were boosted in September by the surprise reduction in OPEC's production target. In the fourth quarter of 2003 and early 2004, strengthening economic activity, falling oil inventories, and the continued depreciation of the dollar contributed to a further run-up in oil prices.

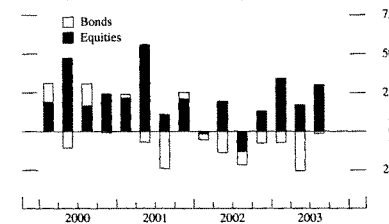
The Financial Account

The financing counterpart to the current account deficit experienced a sizable shift in 2003, as net private inflows fell while foreign official inflows increased. Private foreign purchases of U.S. securities were at an annual rate of about \$350 billion through November, about \$50 billion lower than in the previous year. Private foreign purchases of U.S. equities continued to recede, and, although the level of bond purchases was little changed in the aggregate, foreign purchases shifted somewhat away from agency bonds and toward corporate bonds. Over the same period, purchases by private U.S. investors of foreign securities increased nearly \$80 billion. Accordingly, net inflows through private securities transactions decreased

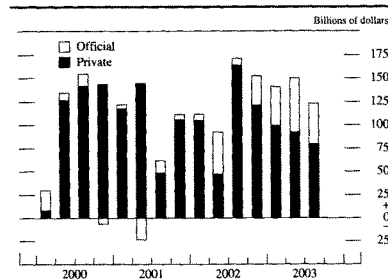
U.S. net international securities transactions



Net private U.S. purchases of foreign securities



U.S. net financial inflows



SOURCE: Department of Commerce.

SOURCE: Department of Commerce and the Federal Reserve Board.

markedly. In contrast, foreign official purchases of U.S. assets surged to record levels in 2003, with the accumulation of dollar reserves particularly high in China and Japan.

Compared with the pace in 2002, foreign direct investment in the United States increased, as merger activity picked up and corporate profits improved. U.S. direct investment abroad held relatively steady at a high level that was largely the result of continued retained earnings. On net, foreign direct investment outflows fell about \$50 billion through the first three quarters of 2003.

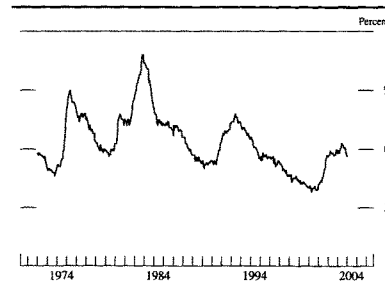
The Labor Market

Employment and Unemployment

With economic activity still sluggish during the first half of 2003, the labor market continued to weaken. Over the first eight months of the year, private nonfarm payroll employment fell, on average, more than 35,000 per month, extending the prolonged period of cutbacks that began in early 2001. The civilian unemployment rate, which had hovered around 5½ percent for much of 2002, moved up to 6¼ percent by June. However, by late in the summer, the labor market began to recover slowly. Declines in private payrolls gave way to moderate increases in employment; over the five months ending in January, private nonfarm establishments added, on average, about 85,000 jobs per month. By January, the unemployment rate moved back down to 5.6 percent.

During the late summer and early fall, prospects for business sales and production brightened, and firms began to lay off fewer workers. Initial claims for unemployment insurance dropped back, and the monthly Current Population Survey (CPS) of households reported a decline in the number of workers who had lost their last

Civilian unemployment rate



NOTE: The data are monthly and extend through January 2004.

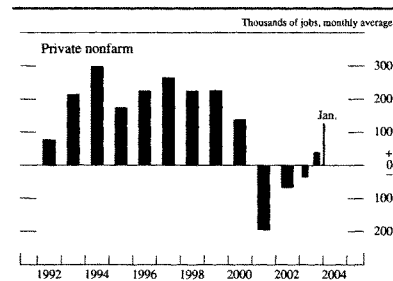
job. However, for many unemployed workers, jobs continued to be difficult to find, and the number of unemployed who had been out of work for twenty-seven weeks or more remained persistently high. The labor force participation rate, which tends to be sensitive to workers' perceptions of the strength of labor demand, drifted lower. Although the CPS indicated a somewhat greater improvement in employment than the payroll report—even after adjusting for conceptual differences between the two measures—the increase in household employment lagged the rise in the working-age population, and the ratio of employment to population fell further during 2003.

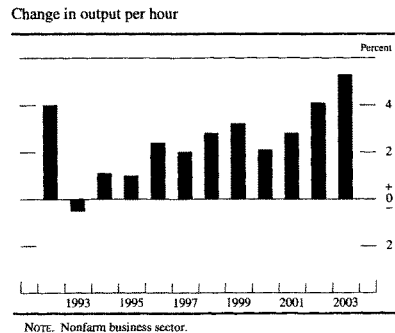
The modest upturn in private payroll employment that began in September was marked by a step-up in hiring at businesses supplying professional, business, and education services, and medical services continued to add jobs. Employment in both the construction industry and the real estate industry rose further, although the number of jobs in related financial services dropped back a bit as mortgage refinancing activity slackened. At the same time, although manufacturers were still laying off workers, the monthly declines in factory employment became smaller and less widespread than earlier. Employment stabilized in many industries that produce durable goods, such as metals, furniture, and wood products, as well as in a number of related industries that store and transport goods. In several other areas, employment remained weak. Manufacturers of nondurables, such as chemicals, paper, apparel, and textiles, continued to cut jobs. Employment in retail trade remained, on net, little changed.

Productivity and Labor Costs

Business efforts to increase efficiency and control costs led to another impressive gain in labor productivity last

Net change in payroll employment





year. Output per hour in the nonfarm business sector surged 5¼ percent in 2003 after having risen a robust 4 percent in 2002 and 2¾ percent in 2001. What is particularly remarkable about this period is that productivity did not decelerate significantly when output declined in 2001, and it posted persistently strong gains while the recovery in aggregate demand was sluggish. Typically, the outsized increases in productivity that have occurred during cyclical recoveries have followed a period of declines or very weak increases in productivity during the recession and have been associated with rebounds in economic activity that were stronger than has been the case, until recently, in this expansion.

On balance, since the business cycle peak in early 2001, output per hour has risen at an average annual rate of 4 percent—noticeably above the average increase of

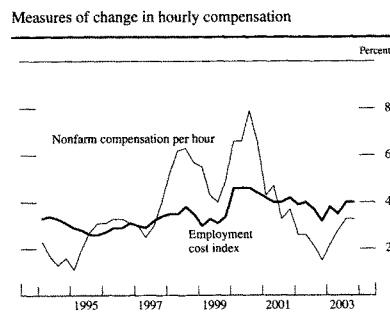
2½ percent that prevailed between 1996 and 2000. In the earlier period, an expansion of the capital stock was an important element in boosting the efficiency of workers and their firms; that impetus to productivity has weakened in the recent period as a result of the steep cutbacks in business investment in 2001 and 2002. Instead, the recent gains appear to be grounded in organizational changes and innovations in the use of existing resources—which are referred to as multifactor productivity. The persistence of a rapid rise in multifactor productivity in recent years, along with signs of a pickup in capital spending, suggests that part of the step-up in the rate of increase of labor productivity may be sustained for some time.

In 2003, the employment cost index (ECI) for private nonfarm businesses, which is based on a survey conducted quarterly by the Bureau of Labor Statistics, rose 4 percent—about ¾ percentage point more than the increase in 2002. Compensation per hour in the nonfarm business sector, which is based on data constructed for the NIPA, is estimated to have increased 3¼ percent in 2003, up from 1½ percent in 2002. In recent years, the NIPA-derived series has shown much wider fluctuations in hourly compensation than the ECI, in part because it includes the value of stock option exercises, which are excluded from the ECI. The value of options exercised shot up in 2000 and then dropped over the next two years.

Most of the acceleration in hourly compensation in 2003 was the result of larger increases in the costs of employee benefits. The ECI for wages and salaries rose 3 percent—up slightly from the pace in 2002 but still well below the rates of increase in the preceding six years. Wage gains last year likely were restrained by persistent slack in the demand for labor as well as by the pressure on employers to control overall labor costs in the face of the rapidly rising cost of benefits. Employer costs for benefits, which had risen 4¾ percent in 2002, climbed another 6½ percent in 2003. The cost of health insurance as measured by the ECI has been moving up at close to a double-digit rate for three consecutive years. In addition, in late 2002 and early 2003, employers needed to substantially boost their contributions to defined-benefit retirement plans to cover the declines in the market value of plan assets.

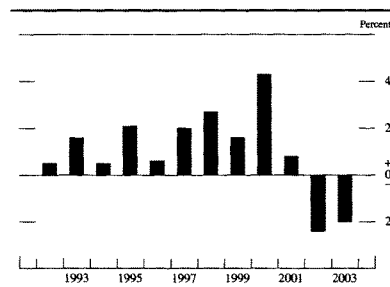
Prices

Headline consumer price inflation in 2003 was maintained by an acceleration in food prices and another sizable increase in energy prices, but core rates of inflation fell for a second year. Although the strong upturn in economic activity in the second half of last year began to reduce unemployment and to boost industrial utilization rates,



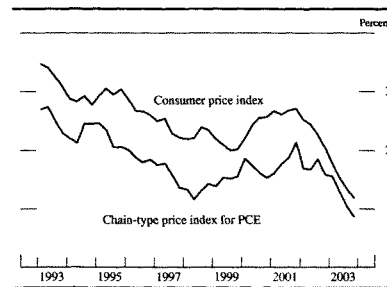
NOTE. The data are quarterly and extend through 2003:Q4. For nonfarm compensation, change is over four quarters; for the employment cost index (ECI), change is over the twelve months ending in the last month of each quarter. Nonfarm compensation is for the nonfarm business sector; the ECI is for private industry excluding farm and household workers.

Change in unit labor costs



NOTE: Nonfarm business sector.

Change in consumer prices excluding food and energy



NOTE: Change is over four quarters, and the data extend through 2003:Q4.

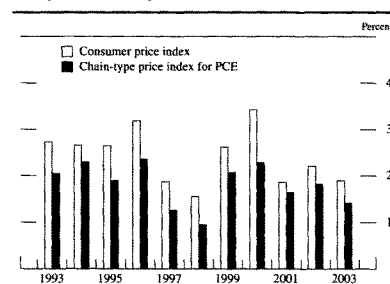
considerable slack in labor and product markets continued to restrain inflation throughout the year. A further moderation in the costs of production also helped to check inflation: As a result of another rapid rise in productivity, businesses saw their unit labor costs decline in 2003 for a second consecutive year. In contrast, prices for imported goods excluding petroleum, computers, and semiconductors increased at about the same rate as prices more generally; between 1996 and 2002, these import prices fell relative to overall prices for personal consumption expenditures (PCE). The chain-type price index for PCE excluding food and energy rose just under 1 percent in 2003, about $\frac{3}{4}$ percentage point less than in 2002. A broader measure of inflation, the chain-type price index for GDP, increased $1\frac{1}{2}$ percent in 2003, the same slow pace as in 2002. Both measures of inflation were roughly a percentage point lower than in 2001.

Consumer energy prices fluctuated widely over the four quarters of 2003, and the PCE index for energy was up

$7\frac{1}{4}$ percent over the period. In the first quarter of the year, the combination of a further rise in the cost of crude oil, increased wholesale margins for gasoline, and unusually tight supplies of natural gas pushed up consumer energy prices sharply. Although the prices of petroleum-based products turned down when the price of crude oil fell back in March, a number of supply disruptions in late summer resulted in another temporary run-up in the retail price of gasoline. In the spring, the price of natural gas began to ease as supplies improved, but it remained high relative to the level in recent years. Electricity prices also moved up during 2003, in part because of the higher input costs of natural gas. In January 2004, a cold wave in the Northeast, together with the rise in the price of crude oil since early December, once again led to spikes in the prices of gasoline and natural gas.

The PCE price index for food and beverages increased $2\frac{3}{4}$ percent in 2003 after having risen just $1\frac{1}{4}$ percent a year earlier. Much of the acceleration can be traced to strong demand for farm products, but prices paid by consumers for food away from home—which depend much more heavily on the cost of labor than on prices of food products—were up 3 percent in 2003, also somewhat more than overall consumer price inflation. Poor harvests abroad, especially in Europe, contributed importantly to the heightened demand for U.S. farm products. Thus, despite a bumper crop of corn and some other grains in the United States, world stocks were tight and prices remained high. In addition, the U.S. soybean crop was crimped by late-season heat and dryness, which further tightened world supplies. Concerns about the cases of mad cow disease that were identified in herds in Japan and Canada supported strong domestic and export demand for U.S. beef for most of last year while supplies edged down. But, at year-end, when a case of mad cow

Change in consumer prices



Alternative measures of price change

Percent

| Price measure | 2001 | 2002 | 2003 |
|---|------|------|------|
| <i>Chain-type</i> | | | |
| Gross domestic product | 2.4 | 1.4 | 1.5 |
| Gross domestic purchases | 1.6 | 1.7 | 1.6 |
| Personal consumption expenditures | 1.6 | 1.8 | 1.4 |
| Excluding food and energy | 2.1 | 1.6 | .9 |
| Chained CPI | 1.5 | 1.8 | 1.4 |
| Excluding food and energy | 2.1 | 1.6 | .6 |
| <i>Fixed-weight</i> | | | |
| Consumer price index | 1.8 | 2.2 | 1.9 |
| Excluding food and energy | 2.7 | 2.1 | 1.2 |

Note. Changes are based on quarterly averages and are measured to the fourth quarter of the year indicated from the fourth quarter of the preceding year.

disease was discovered in a domestic herd, export demand for U.S. beef plunged and drove the price of live cattle down sharply. A portion of the drop in cattle prices likely will show through to consumer prices for beef early this year.

The decline in core inflation in 2003 was broadly based. Prices of core consumer goods fell somewhat faster than a year earlier; the declines were led by larger cuts in prices of apparel, motor vehicles, electronic equipment, and a variety of other durable goods. At the same time, prices of non-energy services rose less rapidly. The deceleration in core consumer prices measured by the CPI is somewhat greater than that measured by the PCE index. In each index, the costs of housing services to tenants and owners rose less in 2003 than in 2002, but because these costs receive a larger weight in the CPI, their slowing contributed a greater amount to the CPI's deceleration. In addition, the different measurement of the prices of medical services in the two series contributed to the smaller deceleration in non-energy services in the PCE. The medical services component of the CPI, which measures out-of-pocket expenses paid by consumers, increased 4 percent in 2003, down from 5½ percent a year earlier. Alternatively, the PCE for medical services is a broader measure that uses producer price indexes (PPI) to capture the costs of services provided by hospitals and doctors; it continued to increase more slowly than the CPI for medical services last year, 3¼ percent, but it was up slightly from its increase of 2½ percent in 2002.

Survey measures of expected inflation were little changed, on balance, in 2003. According to the Federal Reserve Bank of Philadelphia's survey of professional forecasters, expectations for CPI inflation ten years ahead remained at 2½ percent last year. As measured by the Michigan Survey Research Center survey of households, median five- to ten-year inflation expectations, which averaged 3 percent in 2001, were steady at 2¾ percent in 2003 for a second consecutive year. Inflation compensation as measured by the spread between the yield on nominal Treasury securities and their indexed counterparts

varied over a wide range in 2003, settling at just under 2½ percent at year-end. Shorter-term inflation expectations also posted some wide swings during 2003; year-ahead expectations in the Michigan SRC survey spiked early in the year with the sharp increase in energy prices and dipped briefly to an unusually low level at midyear as actual inflation eased in response to lower energy prices. However, year-ahead inflation expectations settled back to just over 2½ percent at the end of the year, about the same as at the end of 2002.

The PPI for crude materials excluding food and energy products, which had dropped 10 percent in 2001, rose 11¾ percent in 2002 and another 17½ percent in 2003. The upswing was driven by the pickup in demand associated with the acceleration in both domestic and worldwide industrial activity and by the pass-through of higher energy costs. Such wide cyclical swings in commodity prices have only a small effect on movements in the prices of intermediate and finished goods. At later stages of production and distribution, commodity costs represent only a small share of overall costs, and some portion of the change in commodity prices tends to be absorbed in firms' profit margins. Thus, the recent pickup in prices at the intermediate stage of processing has been more muted; after having fallen almost 1½ percent in 2001, the PPI for core intermediate materials rose 1¼ percent in 2002 and 2 percent in 2003.

U.S. Financial Markets

On balance, financial market conditions became increasingly supportive of growth over 2003 as investors became more assured that the economy was on solid footing. Equity prices marched up after the first quarter of the year in response to the initiation and swift conclusion of major combat operations in Iraq, positive earnings reports, and—in the second half of the year—a stronger pace of economic growth. Risk spreads on corporate debt declined, with the spreads on the debt of both investment-grade firms and speculative-grade firms ending 2003 at their lowest levels since 1998. Thus, although Treasury coupon yields ended the year 30–40 basis points higher, yields on many corporate bonds ended the year lower. Commercial banks appeared somewhat slower than bond investors to lend at more favorable terms; nevertheless, by late in the year, banks had eased both standards and terms on C&I loans.

Demand for short-term debt, however, remained very weak, and business loans and outstanding commercial paper continued to run off. In response to a widening budget deficit and a rapid expansion of federal debt, the Treasury increased the frequency of its debt auctions. Declines in mortgage interest rates over the first half of

Interest rates on selected Treasury securities



NOTE: The data are daily and extend through February 4, 2004.

the year led to an extraordinary increase in mortgage debt, as originations for home purchase and for refinancings both climbed to record levels.

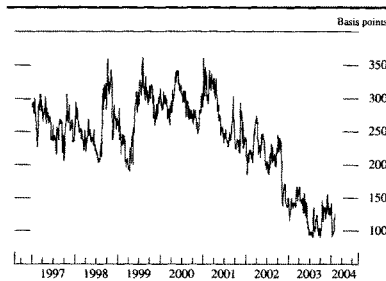
Interest Rates

Interest rates fell for most of the first half of 2003, primarily in response to continuing weak economic data and an associated marking down of expectations for the federal funds rate. Global uncertainty ran high, particularly surrounding the timing of military intervention in Iraq, which elevated safe-haven demands and depressed yields on Treasury securities. Moreover, the weak March employment report and other disappointing news about economic activity seemed to cause a substantial shift in views about monetary policy. Data from the federal funds futures market suggested a significant probability of a

further easing of policy and did not imply any tightening before early 2004. Even as geopolitical tensions eased, weaker-than-expected economic data continued to hold down Treasury yields. The FOMC's statement following its May meeting that an "unwelcome fall in inflation" remained a risk reinforced the notion that monetary policy would stay accommodative, and, indeed, judging from market quotes on federal funds futures, market participants anticipated further easing. Mortgage rates followed Treasury yields lower, precipitating a huge surge of mortgage refinancing. To offset the decline in the duration of their portfolios stemming from the jump in prepayments, mortgage investors reportedly bought large quantities of longer-dated Treasuries, amplifying the fall in yields. Interest rates on corporate bonds also declined in the first half of the year, prompting many firms to issue long-term debt to pay down other, more expensive forms of debt and build up cash assets. Growing confidence that the frequency and severity of corporate accounting scandals were waning likely contributed to the narrowing in risk spreads. By the end of spring, default rates on corporate bonds had begun to decline, and corporate credit quality appeared to stabilize.

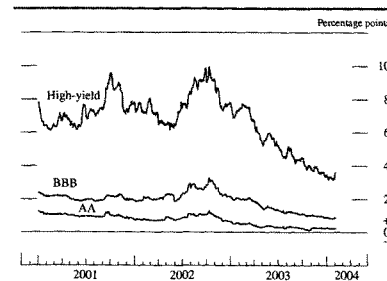
By the time of the June FOMC meeting, federal funds futures data implied that market participants had generally come to expect an aggressive reduction in the target federal funds rate, so the Committee's decision to lower the target rate by only 25 basis points came as a surprise to some. In addition, some investors were reportedly disappointed that the statement following this meeting included no mention of "unconventional" monetary policy actions that would be aimed at lowering longer-term yields more directly than through changes in the federal funds rate target alone. As a result, market interest rates backed

Implied volatility of short-term interest rates



NOTE: The data are daily and extend through February 4, 2004. The series shown is the implied volatility of the three-month eurodollar rate over the coming four months, as calculated from option prices.

Spreads of corporate bond yields over the ten-year Treasury yield



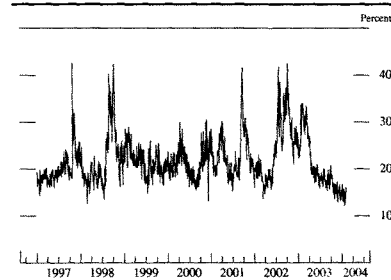
NOTE: The data are daily and extend through February 4, 2004. The spreads compare the yields on the Merrill Lynch AA, BBB, and 175 high-yield indexes with the yield on the ten-year off-the-run Treasury note.

up, with the move probably amplified by the unwinding of mortgage-related hedging activity. The Chairman's monetary policy testimony in July, and the FOMC's statements at subsequent meetings that noted that policy could remain accommodative for "a considerable period," apparently provided an anchor for the front end of the yield curve. At the same time, increasingly positive economic reports bolstered confidence in the markets, and longer-dated Treasury securities ended the year about 40 basis points above their year-earlier levels. But, with the expansion evidently gaining traction and investors becoming more willing to take on risk, corporate risk spreads, particularly those on speculative-grade issues, continued to fall over the second half of the year. Treasury yields fell early in 2004, largely in response to the weaker-than-expected December labor market report. After the release of the Committee's statement following its January meeting, Treasury yields backed up a bit as futures market prices implied an expectation of an earlier onset of tightening than had been previously anticipated.

Equity Markets

Broad equity price indexes ended the year 25 percent to 30 percent higher. Early in the year, stock prices were buffeted by mixed news about the pace of economic expansion and by heightened geopolitical tensions. Rising oil prices boosted the shares of energy companies very early in the year while, by and large, stocks in other sectors were stumbling. By spring, however, positive news on corporate earnings—often exceeding expectations—and easing of geopolitical tensions associated with the initiation of military action in Iraq boosted equity prices significantly. Subsequently, the swift end to major combat operations in Iraq caused implied volatility on the

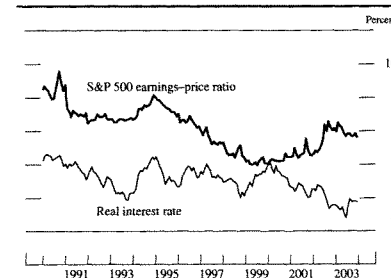
Implied S&P 500 volatility



NOTE: The data are daily and extend through February 4, 2004. The series shown is the implied volatility of the S&P 500 stock price index as calculated from the prices of options that expire over the next several months.
SOURCE: Chicago Board Options Exchange.

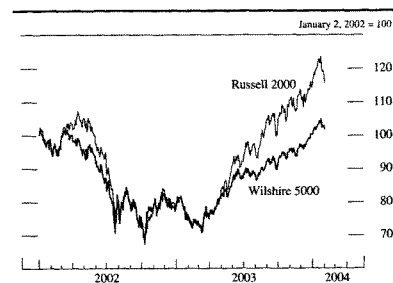
S&P 500 index to fall substantially. Over the rest of the year, increasingly positive earnings results contributed to a sustained rally in stock prices, and implied volatility in equity markets fell further. Corporate scandals—albeit on a smaller scale than in previous years—continued to emerge in 2003, but these revelations appeared to leave little lasting imprint on broad measures of stock prices. For the year as a whole, the Russell 2000 index of small-cap stocks and the technology-laden Nasdaq composite index, which rose 45 percent and 50 percent, respectively, noticeably outpaced broader indexes. To date in 2004, equity markets have continued to rally.

S&P 500 forward earnings-price ratio and the real interest rate



NOTE: The data are monthly and extend through December 2003. The forward earnings-price ratio is based on I/B/E/S consensus estimates of earnings over the coming year. The real interest rate is estimated as the difference between the ten-year Treasury rate and the expected ten-year inflation rate reported in the survey by the Federal Reserve Bank of Philadelphia.

Major stock price indexes



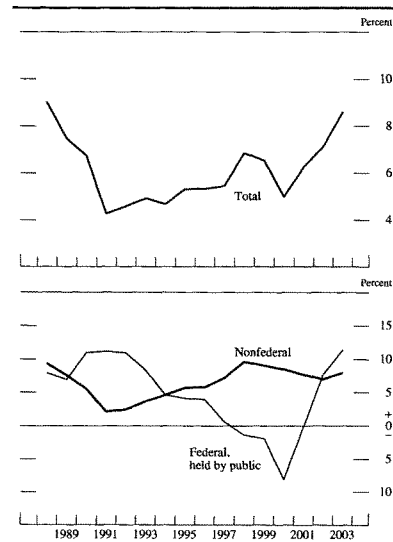
NOTE: The data are daily and extend through February 4, 2004.

With the sustained rise in stock prices, the ratio of expected year-ahead earnings to stock prices for firms in the S&P 500 edged down over 2003. The gap between this ratio and the real ten-year Treasury yield—a crude measure of the equity risk premium—narrowed a bit over the course of the year, though it remains in the upper part of the range observed over the past two decades.

Debt and Financial Intermediation

Aggregate debt of the domestic nonfinancial sectors is estimated to have increased about 8¼ percent in 2003, just over a percentage point faster than in 2002. Federal debt accelerated sharply, rising 11 percent, owing to the larger budget deficit. Household debt rose almost as rapidly, and the increase in state and local government debt also was substantial. In contrast, business borrowing remained subdued last year.

Change in domestic nonfinancial debt

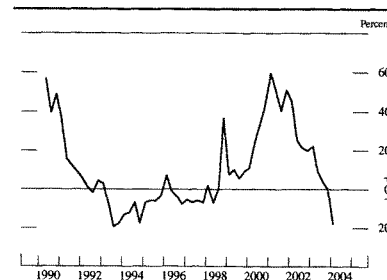


NOTE: For 2003, change is from 2002:Q4 to 2003:Q3 at an annual rate. For earlier years, the data are annual and are computed by dividing the annual flow for a given year by the level at the end of the preceding year. The total consists of nonfederal debt and federal debt held by the public. Nonfederal debt consists of the outstanding credit market debt of state and local governments, households, nonprofit organizations, and nonfinancial businesses. Federal debt held by the public excludes securities held as investments of federal government accounts.

In the business sector, investment spending, particularly in the beginning of the year, was mainly financed with internal funds, limiting, though not eliminating, businesses' need to increase debt. With long-term rates falling through midyear and credit spreads—especially for riskier borrowers—narrowing, corporate treasurers shifted their debt issuance toward bond financing and away from shorter-term debt. Household borrowing also shifted in response to lower longer-term rates. Mortgage rates followed Treasury rates lower in the spring, and mortgage originations for both home purchases and refinancings surged. Refinancing activity appears to have held down growth of consumer credit as households extracted equity from their homes and used the proceeds, in part, to pay down higher-cost consumer debt. Nevertheless, consumer credit posted a moderate advance in 2003, buoyed by heavy spending on autos and other durables. A substantial widening of the federal deficit forced the Treasury to increase its borrowing significantly. To facilitate the pickup in borrowing, the Treasury altered its auction cycle to increase the frequency of certain issues and reintroduced the three-year note.

Depository credit rose 6 percent in 2003 and was driven by mortgage lending and the acquisition of mortgage-backed securities by both banks and thrift institutions. Consumer lending also was substantial, as lower interest rates and auto incentives spurred spending on durable goods. In contrast, business loans fell 7¼ percent over 2003, a drop similar to the runoff in 2002. Survey evidence suggests that the decline in business lending at banks was primarily the result of decreased demand

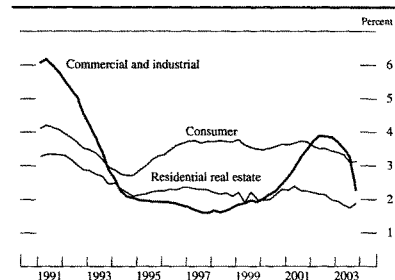
Net percentage of domestic banks tightening standards on commercial and industrial loans to large and medium-sized firms



NOTE: The data are based on a survey generally conducted four times per year; the last reading is from the January 2004 survey. Large and medium-sized firms are those with annual sales of \$50 million or more. Net percentage is the percentage reporting a tightening less the percentage reporting an easing.

SOURCE: Federal Reserve Senior Loan Officer Opinion Survey on Bank Lending Practices.

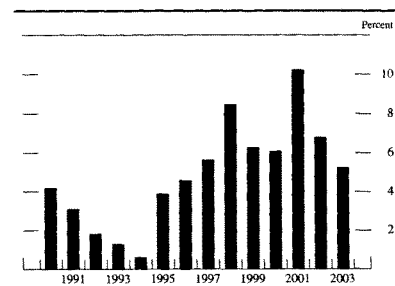
Delinquency rates on selected types of loans at banks



NOTE: The data, from bank Call Reports, are quarterly, seasonally adjusted, and extend through 2003:Q4.

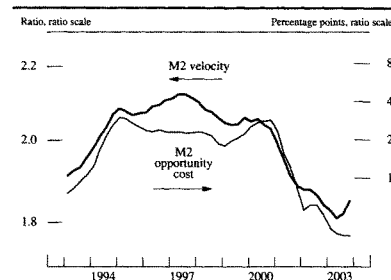
for these loans, with respondent banks often citing weak investment and inventory spending. Moreover, the contraction was concentrated at large banks, whose customers tend to be larger corporations that have access to bond markets, and the proceeds of bond issuance were apparently used, in part, to pay down bank loans. The January 2004 Senior Loan Officer Opinion Survey reported a pickup in business loan demand arising mainly from increased spending on plant and equipment and on inventories. Supply conditions apparently played a secondary role in the weakness in business loans in 2003. Banks tightened standards and terms on business loans somewhat in the first half of the year, but by year-end they had begun to ease terms and standards considerably, in part because of reduced concern about the economic outlook.

M2 growth rate



NOTE: M2 consists of currency, travelers checks, demand deposits, other checkable deposits, savings deposits (including money market deposit accounts), small-denomination time deposits, and balances in retail money market funds.

M2 velocity and opportunity cost

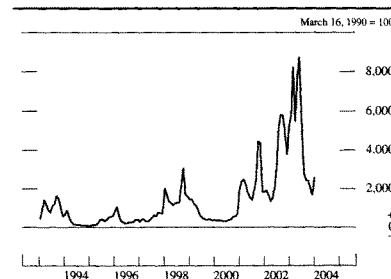


NOTE: The data are quarterly and extend through 2003:Q4. The velocity of M2 is the ratio of nominal gross domestic product to the stock of M2. The opportunity cost of holding M2 is a two-quarter moving average of the difference between the three-month Treasury bill rate and the weighted average return on assets included in M2.

The M2 Monetary Aggregate

M2 increased $5\frac{1}{4}$ percent in 2003, a pace somewhat slower than in 2002 and a bit below the rate of expansion of nominal income. The deceleration in M2 largely reflected a considerable contraction in the final quarter of the year after three quarters of rapid growth. The robust growth in money around midyear was concentrated in liquid deposits and likely resulted in large part from the wave of mortgage refinancings, which tend to boost M2 as the proceeds are temporarily placed in non-interest-bearing accounts pending disbursement to the holders of mortgage-backed securities. Moreover, around the middle of the year, the equity that was extracted from home values during refinancings probably provided an

Mortgage refinancing application index



NOTE: The data are monthly and extend through January 2004.
SOURCE: Mortgage Bankers Association.

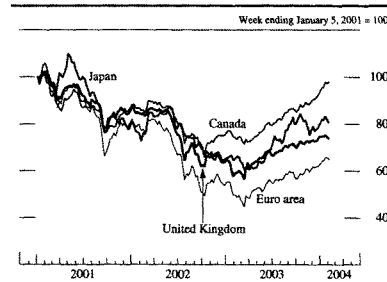
additional boost to deposits for a time, as households temporarily parked these funds in M2 accounts before paying down other debt or spending them. In the fourth quarter, M2 contracted at an annual rate of 2 percent, the largest quarterly decline since consistent data collection began in 1959. As mortgage rates backed up and the pace of refinancing slowed, the funds that had been swelling deposits flowed out, depressing M2. The sustained rally in equity markets after the first quarter of the year may also have slowed M2 growth, as expectations of continued higher returns led households to shift funds from M2 assets to equities, a view reinforced by the strong flows into equity mutual funds.

International Developments

Economic growth abroad rebounded in the second half of last year as factors that weighed on the global economy in the first half—including the SARS epidemic and uncertainty surrounding the war in Iraq—dissipated. Foreign growth also was boosted by the strong rebound in the U.S. economy, the revival of the global high-tech sector, and, in many countries, ample policy stimulus.

Strong second-half growth in China stimulated activity in other emerging Asian economies and Japan by raising the demand for their exports. Growth in Japan also was spurred by a recovery in private spending there on capital goods. Economic activity in Europe picked up in the second half, as export growth resumed. Economic growth in Latin America has been less robust; the Mexican economic upturn has lagged that of the United States, and Brazil's economy has only recently begun to recover from the effects of its 2002 financial crisis.

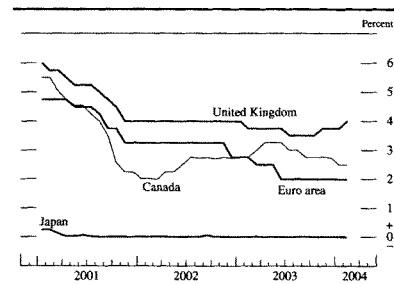
Equity indexes in selected foreign industrial countries



NOTE: The data are weekly. The last observations are the average of trading days through February 4, 2004.

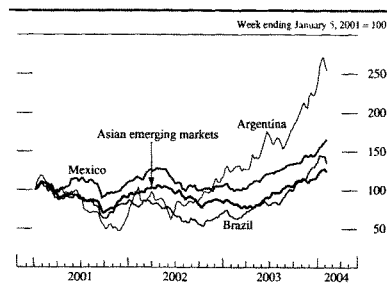
Monetary authorities abroad generally eased their policies during the first half of 2003 as economic activity stagnated. In the second half, market participants began to build in expectations of eventual monetary tightening abroad, and official interest rates were raised by year-end in the United Kingdom and Australia. Canadian monetary policy followed a different pattern; the Bank of Canada raised official interest rates in the spring as inflation moved well above its 1 percent to 3 percent target range but cut rates later in the year and again early this year as slack emerged and inflation moderated. Similarly, lower inflation in Mexico and Brazil allowed authorities to ease monetary policy during 2003. The Bank of Japan maintained official interest rates near zero and continued to increase the monetary base.

Official interest rates in selected foreign industrial countries



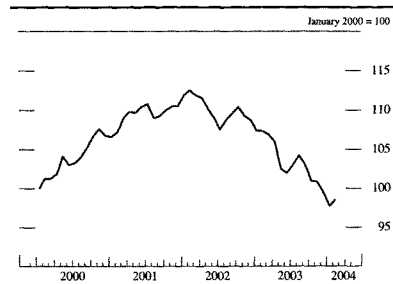
NOTE: The data are as of month-end; the last observations are for February 5, 2004, when the Bank of England raised its official rate. The data shown are the call money rate for Japan, the overnight rate for Canada, the refinancing rate for the euro area, and the repurchase rate for the United Kingdom.

Equity indexes in selected emerging markets



NOTE: The data are weekly. The last observations are the average of trading days through February 4, 2004. Asian emerging markets are China, Hong Kong, India, Indonesia, Malaysia, Pakistan, the Philippines, Singapore, South Korea, Taiwan, and Thailand.

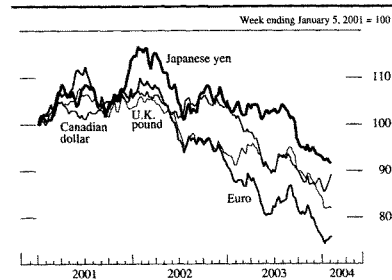
U.S. dollar nominal exchange rate, broad index



NOTE: The data are monthly and are in foreign currency units per dollar. The last observation is the average of trading days through February 4, 2004. The broad index is a weighted average of the foreign exchange values of the U.S. dollar against the currencies of a large group of major U.S. trading partners. The index weights, which change over time, are derived from U.S. export shares and from U.S. and foreign import shares.

In foreign financial markets, equity prices fell, on average, until mid-March but since then have risen in reaction to indications of stronger-than-expected global economic activity. Emerging-market equity indexes outpaced those in the industrial countries in 2003, with markets in Latin America posting particularly strong gains. Around midyear, long-term interest rates declined to multiyear lows in many countries as economic growth slowed and inflationary pressures diminished, but those rates moved higher in the second half as growth prospects improved. Bond spreads came down substantially during the year, both for industrial-country corporate debt and for emerging-market sovereign debt; spreads of the

U.S. dollar exchange rate against selected major currencies



NOTE: The data are weekly and are in foreign currency units per dollar. Last observations are the average of trading days through February 4, 2004.

J.P. Morgan Emerging Market Bond Index (EMBI+) over U.S. Treasury securities fell to their lowest levels since before the Russian crisis of 1998. Gross capital flows to emerging markets, however, remained well below their 1997 peak.

The foreign exchange value of the dollar continued to decline last year as concerns over the financing of the large and growing U.S. current account deficit took on greater prominence. The dollar declined 18 percent against the Canadian dollar, 17 percent against the euro, and 10 percent against the British pound and the Japanese yen. In contrast, the value of the dollar was little changed, on net, against the currencies of our other important trading partners, in part because officials of China and of some other emerging Asian economies managed their exchange rates so as to maintain stability in terms of the dollar. Among Latin American currencies, the dollar declined against the Brazilian and Argentine currencies but appreciated against the Mexican peso. On balance, the dollar depreciated 9 percent during 2003 on a trade-weighted basis against the currencies of a broad group of U.S. trading partners.

Industrial Economies

The euro-area economy contracted in the first half of 2003, weighed down in part by geopolitical uncertainty and higher oil prices. In the second half, economic activity in the euro area began to grow as the global pickup in activity spurred a recovery of euro-area exports despite the continued appreciation of the euro. The monetary policy of the European Central Bank (ECB) was supportive of growth, with the policy interest rate lowered to 2 percent by midyear. Consumer price inflation slowed to around 2 percent, the upper limit of the ECB's definition of price stability. Despite increased economic slack, inflation moved down only a little, partly because the summer drought boosted food prices. For the second straight year, the governments of Germany and France each recorded budget deficits in excess of the 3 percent deficit-to-GDP limit specified by the Stability and Growth Pact. However, in light of economic conditions, European Union finance ministers chose not to impose sanctions.

After a sluggish first quarter, the U.K. economy expanded at a solid pace for the remainder of 2003, supported by robust consumption spending and considerable government expenditure. The Bank of England cut rates in the first half of the year but reversed some of that easing later in the year and early this year as the economy picked up and housing prices continued to rise at a rapid, albeit slower, pace. In June, the British government

announced its assessment that conditions still were not right for the United Kingdom to adopt the euro. In December, the British government changed the inflation measure to be targeted by the Bank of England from the retail prices index excluding mortgage interest (RPIX) to the consumer prices index. U.K. inflation currently is well below the objective of 2 percent on the new target index.

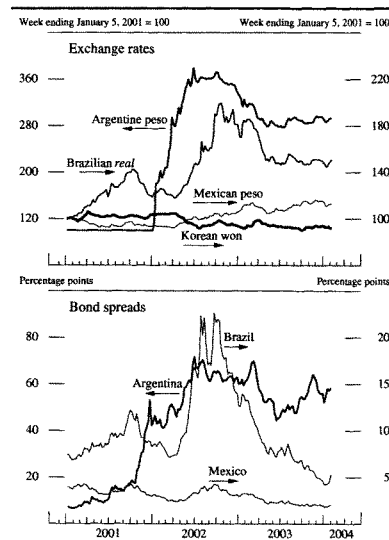
The Canadian economy contracted in the second quarter owing to the impact of the SARS outbreak in Toronto on travel and tourism, but it rebounded in the latter half of the year. Canadian economic growth continued to be led by strong domestic demand; consumption remained robust and investment spending accelerated, offsetting the negative effect of Canadian dollar appreciation on both exports and import-competing industries. Canadian consumer price inflation swung widely last year, rising to 4½ percent on a twelve-month basis in February before falling to 1½ percent in November and ending the year at 2 percent. The swing partly reflected movements in energy prices, but changes in auto insurance premiums and cigarette taxes also played an important role.

Japanese real GDP recorded significant growth in 2003 for the second straight year. Private investment spending made the largest contribution to the expansion. Consumer spending remained sluggish as labor market conditions continued to be soft. However, nominal wages stabilized following a sharp drop in 2002, and leading indicators of employment moved higher. Despite an appreciation of the yen late in the year, Japanese exports posted a strong increase in 2003 primarily because of gains in exports to China and other emerging Asian economies. With consumer prices continuing to decline, the Bank of Japan (BOJ) maintained its policy interest rate near zero and eased monetary policy several times during 2003 by increasing the target range for the outstanding balance of reserve accounts held by private financial institutions at the BOJ. The BOJ also took other initiatives last year to support the Japanese economy, including launching a program to purchase securities backed by the assets of small- and medium-sized enterprises. Japanese banks continued to be weighed down by large amounts of bad debt, but some progress was made in resolving problems of insufficient bank capital and in reducing bad-debt levels from their previous-year highs.

Emerging-Market Economies

Growth in the Asian developing economies rebounded sharply in the second half of 2003 after having contracted in the first half. The outbreak of SARS in China and its spread to other Asian economies was the primary factor depressing growth in the first half, and the subsequent

U.S. dollar exchange rates and bond spreads for selected emerging markets



Note: The data are weekly averages. Last observations are the average of trading days through February 4, 2004. Exchange rates (top panel) are in foreign currency units per dollar. Bond spreads (bottom panel) are the spreads of the J.P. Morgan Emerging Market Bond Index (EMBI+) over U.S. Treasury securities.

recovery of retail sales and tourism after the epidemic was contained was an important factor in the sharp rebound. The pattern of Asian growth also reflected the sharp recovery of the global high-tech sector in the second half after a prolonged period of weakness. Exports continued to be the main engine of growth for the region. However, domestic demand contributed importantly to growth in China, where state-sector investment increased at a rapid clip and a boom in construction activity continued. Supply problems caused food prices and overall consumer prices in China to rise on a twelve-month basis last year, following a period of price deflation during the previous year. In addition, concerns emerged that some sectors of the Chinese economy, particularly the property markets in Beijing and Shanghai, may be overheating.

Korean economic growth turned negative in the first half, as the high level of household debt, labor unrest, and concerns over North Korea's nuclear development depressed private-sector spending. A sharp rise in exports

spurred a revival of growth in the second half even as domestic demand remained subdued.

The Mexican economy remained sluggish through much of the year but recently has shown some signs of improvement. After lagging the rise in U.S. production, Mexican industrial production posted strong gains in October and November, although it remains well below the peak it reached in 2000. Exports rose late last year to almost the peak they had reached in 2000. Consumer price inflation came down over the course of 2003 to 4 percent, the upper bound of the 2 percent to 4 percent target range. The Bank of Mexico has left policy unchanged since tightening five times between September 2002 and March 2003, but market interest rates have fallen owing to weakness in economic activity.

The Brazilian economy contracted in the first half of 2003 partly as a result of the 2002 financial crisis and the consequent monetary policy tightening. It then expanded moderately in the second half, boosted by strong export growth and a recovery in investment spending. Brazilian financial indicators improved significantly in

2003, in part because the Brazilian government began to run a substantial primary budget surplus and to reform the public-sector pension system. The Brazilian stock market soared nearly 100 percent last year, and Brazil's EMBI+ bond spread narrowed by nearly two-thirds. As the Brazilian currency stabilized and began to appreciate, Brazil's inflation outlook improved, allowing the central bank to reverse fully its earlier rate hikes and to reduce the overnight interest rate to a multiyear low, although real interest rates remained high.

The Argentine economy rebounded in 2003 from the sharp contraction that occurred in the wake of its financial crisis in 2001–02. Still, economic activity remains far below pre-crisis levels, and many of Argentina's structural problems have not been addressed. With the government still in default to its bondholders, the country's sovereign debt continued to carry a very low credit rating, and its EMBI+ spread remained extremely high. Even so, the Argentine peso appreciated on balance in 2003, and the Merval stock index nearly doubled over the course of the year.

Chairman Greenspan subsequently submitted the following in response to written questions received from Congressman Joe Baca in connection with the February 11, 2004, hearing before the Committee on Financial Services:

1. The Hispanic population is now 38 million and growing. It will make up a greater proportion of the nation's population in the coming years. Therefore the economic well-being of the country will rely on the strength of Hispanic households. When the largest minority group cannot find jobs, have spent their unemployment benefits and therefore rely on private social service agencies, the economic health of the nation must be affected.

How does the greater unemployment rate of Hispanics affect the weak and fragile recovery that our nation is going through? And what can be done to lower the unemployment rates of Hispanics and African Americans?

As I noted in my prepared remarks, the productivity performance of the past few years has been striking. The strong gains in productivity, however, have forestalled robust increases in business payrolls. To date, the expansion of employment has significantly lagged increases in output. To a surprising degree, firms seem able to continue identifying and implementing new efficiencies in their production processes and thus have found it possible so far to meet increasing orders without stepping up hiring. In all likelihood, however, employment will begin to grow more quickly before long as output continues to expand. Productivity over the past few years has probably received a boost from the efforts of businesses to work off the stock of inefficiencies that had accumulated in the boom years. As those opportunities to enhance efficiency become scarcer and as managers become more confident in the durability of the expansion, firms will surely once again add to their payrolls--a pickup that will benefit all Americans.

2. In 2002, the White House said that the first Bush tax break was supposed to create 800,000 additional jobs by the end of 2002. Instead, we lost 1.9 million jobs. In 2002, the Council of Economic Advisors predicted 3 million new jobs last year. But we lost about 53,000 jobs in 2003.

Why should we believe the President's newest numbers? Obviously, tax cuts for the wealthy have not helped the people in my district get jobs. What specific actions have been taken to help the unemployed find a new job that pays just as well?

As I have stated publicly before, there can be little doubt that the tax cuts of 2001 and 2003 helped shore up a weak economy, raising the level of economic activity and employment above what it otherwise would have been. Accommodative monetary policy and stimulative fiscal policy have aided in the acceleration of economic activity that has occurred over the past year. Businesses have been able to meet that demand by

implementing new efficiencies, and this has held down the expansion of employment to date. As the backlog of unexploited opportunities to enhance efficiency begins to diminish, productivity growth should slow and employment pick up.

3. In the last 3 years 2.8 million manufacturing jobs have been lost. In California 127,000 manufacturing jobs and 55,000 information-sector jobs have been lost. Many of those jobs have gone overseas. By the year 2014, 3.3 million jobs will be moved overseas. The President says this is good for the economy. Chairman Greenspan, you have argued that workers can be confident that new jobs will replace the old ones they lost. But a recent study showed that the jobs created in California in the last two years paid on average 40% less than the jobs they replaced.

How can you tell those Californians who lost their job not to worry when a new job will pay them 40% less? How can someone making \$40,000 afford to live on only \$24,000? What do I tell my constituents who lost out?

Over the years, our competitive economy has given us a standard of living unparalleled for so large an economy. But with that bounty has come the inevitable stresses and anxieties that accompany economic advance. Even in the best of circumstances, discharged workers experience some loss of income in a transition to a new job and the associated new skills. Indeed, finding a new job takes time, and typically results in at least a temporary drop in pay. That loss, especially in a soft labor market, is a source of stress on the affected individuals. But, it is essential to recognize that, over the longer haul, real incomes depend to a very substantial extent on the degree of skill of the population, not the particular jobs or industries workers happen to be in.

What is crucial is to be sure that displaced workers obtain the skills needed to take on the challenges of new jobs and new ways of doing things. History tells us that those people who are most educated and have the most general skills are best positioned to take whatever jobs are created. It is hard to know in advance where new jobs will come from. For generations, human ingenuity has been creating products, industries, and jobs that never before existed, from vehicle assembling to computer software engineering, and with them have come new opportunities for workers with the necessary skills.

Chairman Greenspan subsequently submitted the following in response to written questions received from Congresswoman Judy Biggert in connection with the February 11, 2004, hearing before the Committee on Financial Services:

1) Chairman Greenspan, the Federal Reserve assumes a critical role in the payment system. This role undoubtedly subjects it to some risk of operational failures from a natural disaster or even terrorist attacks. I am particularly concerned with the operational risk charge. I assume the Federal Reserve is also subject to operational risks. Does the Fed allocate its own capital to absorb comparable operational risk, or does it use contingency planning and redundant systems to counter the risk? In Fed Governor Olson's testimony before a House Financial Services Committee hearing on blackouts and other disasters, he indicated that five Fed offices were affected by the blackout but that they recovered admirably thanks to back-up systems and contingency planning. He did not mention that holding capital was a key to this resiliency. If this works at the Fed, why can't it work at banks?

Like all entities, the Reserve Banks are subject to operational risks that must either be borne by the bank, mitigated by internal controls, or managed through insurance arrangements. As you noted in your question, the Federal Reserve System mitigates a portion of its operational risk through contingency planning and back-up systems. Because of their unique central bank nature, the primary benefits of capital allocation cannot be realized by the Reserve Banks.

Capital allocation provides two primary benefits: 1) it requires firms to maintain sufficient capital to absorb associated losses from unmitigated risks, and 2) it provides an internal management and measurement process for making cost-benefit decisions on risk mitigation strategies. Although the Federal Reserve System seeks to mitigate the risks it incurs in the fulfillment of its responsibilities in a cost effective manner, it does this in meeting its stewardship duty to the public rather than to ensure its solvency. As the nation's central bank, the System's Reserve Banks are fully liquid and can, almost by

definition, absorb any loss they may incur. From an internal management perspective, the Reserve Banks do manage the risks associated with their operations. Valuing the cost of the risks incurred, however, cannot be derived from the Reserve Bank's capital structure. The amount of Reserve Bank capital provided by member banks and the associated dividend rate is set by statute rather than the market. As a result, it is incumbent upon the Reserve Banks to approach cost-benefit decisions regarding risk mitigating activities with a bent towards risk mitigation rather than risk taking. This is especially true in light of the non-quantifiable nature of the risk to the System's reputation of a significant failure. As you noted in your question, this approach served the public well during recent disasters.

2) In a paper released by the Bank for International Settlement's Committee on the Global Financial System--a Committee chaired by Fed Vice Chairman Ferguson--it notes that operational risk is difficult to measure and may not be dealt with effectively in quantitative capital rules. The paper suggests a more qualitative approach focusing on risk management. How do you reconcile this statement with the Basel Committee's Pillar 1 capital requirement for operational risk? If operational risk is difficult to measure, how can you proscribe exacting capital standards for it?

Although operational risk is difficult to measure, banks are making sufficient progress in developing and implementing measurement techniques that the Basel Committee believes that a pillar I capital requirement is feasible. The large U.S. banks that will be subject to Basel II advanced internal ratings-based (A-IRB) standards for credit risk will also employ the Advanced Measurement Approach (AMA) for operational risk. Under the AMA, banks will use their own internal assessment of the operational risks they face and the capital needed to support those risks. The intention of the U.S. banking agencies is to allow considerable flexibility to banks in developing their AMA estimates, as long as their processes are comprehensive and well-reasoned. In effect, the capital

requirement will be based upon the bank's own internal economic capital estimate for operational risk, subject to certain qualitative and quantitative criteria.

Both the Basel Committee as well as U.S. regulators recognize that not all large internationally active banks will qualify for the AMA at the date of implementation. In this regard, the Basel Committee is offering the option of a simpler and much less risk sensitive standardized approach, whereas U.S. regulators are proposing to provide transition arrangements for banks to develop the required systems for successful implementation of the AMA.

For all banks, the Basel Committee and U.S. regulators believe that capital requirements cannot be regarded as a substitute for sound risk management and controls. However, the experience of those banks that are expending the resources to develop internal management and measurement processes consistent with the AMA are reporting positive results in their efforts to better manage operational risks. To better understand the current state of preparedness and future business plans, the U.S. banking agencies are now in the process of conducting a benchmarking exercise for all the large banks that could be required to use the advanced approaches in Basel II, as well as a group of banks that may voluntarily comply.

Chairman Greenspan subsequently submitted the following in response to written questions received from Congresswoman Sue Kelly in connection with the February 11, 2004, hearing before the Committee on Financial Services:

1. Investor Confidence

In order to maximize the nascent growth we are experiencing in the economy, we must work to strengthen investor confidence. The Committee has considered proposals to improve disclosure to investors and strengthen corporate governance in many different areas--from investment banking to accounting, and now mutual funds.

a) As regulatory reforms are considered, and enforcement action is pursued by states and the SEC, what kind of direction or message should be provided directly to the individual investor to help build this confidence?

During the equity market boom, individual investors were served very poorly by some of those that our capitalist system relies upon to protect their interests, notably by some corporate CEOs and CFOs, corporate board members, and accountants and auditors. Fortunately, the vast majority of corporate officials are behaving appropriately and serving the interests of investors.

Confidence is built on trust. Investors will inevitably conclude on the basis of the evidence which CEOs are trustworthy, and on which accounting firms they can rely.

Public policy should be directed at transparency of accounts and the veracity of public statements of company officials.

b) Do you think that prosecuting criminals and maximizing returns directly to injured investors can help improve investor confidence?

Yes. Investors are likely to perceive that criminal prosecutions of corporate wrongdoing will help deter such behavior in the future. Directing the proceeds of penalties and fines for wrongdoing to investors will offset some of the losses that they have suffered as a result of such behavior.

2. Financial Literacy

Financial literacy is an important element to investor confidence. I worked to include a national strategy on financial literacy in the FCRA legislation Congress passed last year--the "SAFE Strategy" ("Strategy to Assuring Financial Empowerment"). Since you will be involved in crafting this strategy, we would like to get your thoughts on maximizing the benefits of this effort?

For an increasingly complex financial system to function effectively, widespread dissemination of timely financial and other relevant information among educated market participants is essential if they are to make the type of informed judgments that promote their own well-being and foster the most efficient allocation of capital. Certainly, the objectives of the Financial Literacy and Education Improvement Act, which includes the development of the SAFE Strategy report, are consistent with these economic tenets, as it seeks to identify efficiencies in the delivery of financial education among the broad range of providers.

In considering means to improve the financial status of families, it is clear that education can play a critical role by equipping consumers with the knowledge required to make wise decisions when choosing among a myriad of financial products and providers. This is especially the case for populations that have traditionally been underserved by our financial system. In particular, financial literacy education may help to prevent vulnerable consumers from becoming entangled in financially devastating credit and investment arrangements. To stem the occurrence of abusive, and at times illegal, practices, all agree that consumer education is essential. An informed consumer is simply less vulnerable to fraud and abuse.

While the benefits of education are indisputable, the magnitude of the challenge in providing effective education in an efficient manner is considerable. This is particularly true in relation to financial education, due to the broad range of audiences and their diverse needs, as well as the dynamic nature of the financial services industry. An advantage that the Financial Literacy and Education Commission has is the strength and experience of its members, all of which have provided various types of consumer education. Building on such experiences can increase the effectiveness of the educational efforts undertaken. In addition, advancements in financial literacy may also be achieved by capitalizing on a broad-based delivery mechanism. Building bridges between community organizations, educational institutions, and private business will be an essential aspect of our efforts to increase familiarity with financial principles and tools that are fundamental to improving individual economic well-being.

3. Securities Regulation

In response to a question regarding the current coordination between state and federal securities regulators, you mentioned that “it is important to recognize that it is very easy in the process of enforcing the law against criminality to inadvertently involve ourselves in functions which restrict market competition and, in doing so, will undermine the efficacy of the institutions that we are concerned about, institutions which are very important to the functioning of the American financial system.” You concluded, “And I would be very concerned were we in our endeavor to root out very

properly criminality from our institutions that we didn't know where the boundary line was."

a) What is the potential impact of these actions on individual investors, the capital markets, and the overall economy?

b) How could we alleviate or avoid any potential negative impact?

We should not make regulatory policy through enforcement actions. We should make clear that any terms and conditions of enforcement actions apply only to the parties against which the action is taken. If the investigation that led to an enforcement action points to the need for changes to the regulatory framework, the agency with regulatory authority should follow its normal rulemaking process, which includes opportunity for public comment. The exposure of regulatory proposals is critical if we are to avoid unintended and unwelcome consequences, including adverse effects on the efficiency and safety of financial markets and institutions.

c) Do you think that individual investors and our capital markets would benefit from greater coordination between state and federal regulators to maximize enforcement and ensure the highest level of expertise?

Yes. The integration of U.S. capital markets creates a need for coordination between federal and state authorities. Furthermore, the states cannot hope to replicate the expertise of the SEC and coordination with the SEC would allow the states to draw on that expertise.

d) In order to encourage coordination between securities regulators, would it make sense that the SEC, the regulator of the national capital markets system, be notified if the action of one state would impact the operation or jurisdiction of another state?

Yes.

4. Terrorism Reinsurance

Chairman Greenspan, in the aftermath of September 11th, 2001, you were a strong proponent of legislation to provide a federal reinsurance backstop for terrorism.

a) TRIA expires at the end of next year, and I would like to get your thoughts on the stability TRIA has provided to our economy over the last two years.

The Terrorism Risk Insurance Act (TRIA) was enacted to provide a temporary risk-sharing program to enable private insurers to offer terrorism insurance while they develop methods for pricing it. Recent reports suggest, however, that relatively few businesses have elected to purchase terrorism coverage since TRIA went into effect. Given this outcome, the extent to which TRIA has helped to stabilize the economy is unclear at this time.

The Treasury Department is currently collecting data to evaluate the effectiveness of TRIA for its report to Congress due June 30, 2005. That report will allow firmer conclusions to be drawn about the efficacy of TRIA and about the form of any future legislation that may be appropriate if TRIA is allowed to expire on December 31, 2005.

b) Could the failure to reauthorize TRIA pose any potential impact on the marketplace for terrorism insurance or reinsurance, and thereby impair current or future construction projects or the overall economy?

I would suggest deferring any judgment on this question until the Treasury issues its report next June.

c) Should Congress consider retaining a systematic approach in the event of an attack--especially since there is no cost involved unless there is another event?

Given the expiration of TRIA at the end of 2005, Congress will need to decide whether to extend the current program, replace it with another program, or remove the federal backstop. Congress should carefully consider these choices and, to the extent possible, make its intentions clear well before the end of 2005 to resolve the uncertainty facing the private sector.

5. Anti-money laundering

Your office has worked with the Oversight Subcommittee on issues related to critical infrastructure and the implementation of anti-money-laundering legislation. This Committee crafted Title III of the PATRIOT Act, which is aimed at monitoring the flow of illicit money.

a) What are your thoughts on the use of Title III of the USA PATRIOT Act, including the requirement that foreign countries and financial institutions share cross-border information in order to do business with, or in, our country?

The provisions of Title III of the USA PATRIOT Act are generally designed to help prevent illicit use of the U.S. financial system and to assist U.S. law enforcement in detecting wrongdoing. Toward this end, sections of the Act restrict access to the U.S. banking system and seek to improve the availability of information about foreign financial

institutions. For example, U.S. banks may not maintain correspondent accounts for foreign "shell" banks, which may have no legitimate business purpose or real presence in a foreign location. Also, U.S. banking organizations must obtain information about the ownership and activities of their foreign correspondent banks and must take steps to ensure that they are not affording foreign shell banks indirect access to the U.S. banking system. In addition, U.S. banks must perform due diligence with respect to correspondent accounts of foreign financial institutions and private banking accounts held by foreign persons to ensure that such accounts are appropriately monitored and any suspicious activity is identified and reported.

In the normal course of supervisory activities, the Federal Reserve examines whether the banking organizations supervised by the Federal Reserve have obtained the required information from their foreign correspondents and have closed foreign shell bank accounts as required by the law.

The Treasury, in consultation with the Board and other federal banking agencies, is directed by section 324 of the Act to provide the Congress with an evaluation of the operations of provisions in Title III of the Act and to make legislative recommendations. We understand that this report is currently in preparation at Treasury, and we have provided input on a staff level.

b) In the last three months, the Federal Reserve has experienced a noticeable increase in the number of enforcement actions related to BSA requirements. Why has this just started now, and what has changed to cause this increase?

Section 8 of the Federal Deposit Insurance Act (12 U.S.C. 1818(s)) requires the Federal Reserve and the other federal banking agencies to take formal enforcement action against banking organizations that fail to comply with regulations requiring them to establish and maintain procedures to ensure compliance with the BSA. The Federal Reserve regulation requiring such a program is found at 12 C.F.R. 208.63. When examiners identify serious deficiencies in the BSA compliance procedures of a banking organization supervised by the Federal Reserve, formal, public action is taken in conformity with 12 U.S.C. 1818(s).

The Federal Reserve has not experienced a significant increase in formal, public, BSA-related enforcement actions in recent months. Between December 2003 and March 2004, the Federal Reserve issued several formal actions that were based in principal part on safety and soundness concerns. In three of the cases, the actions also included provisions designed to address BSA compliance deficiencies. From mid- to late 2003, the Federal Reserve issued approximately a dozen formal enforcement actions. Approximately half were either based on, or included provisions relating to, BSA compliance; the remainder were based on safety and soundness concerns.

c) What do you conclude about the fact that most of these enforcement actions have involved smaller institutions? Do smaller institutions have greater compliance difficulties, or are larger institutions more equipped to comply with requirements?

In the past year, the Federal Reserve has issued formal actions based on, or including provisions relating to, BSA compliance against banking organizations of widely varying sizes. Staff of the Federal Reserve Board seeks to ensure that the supervisory response to identified deficiencies, including BSA-related deficiencies, is consistent throughout the Federal Reserve System, and differences among institutions are a factor in determining appropriate supervisory action. (For example, an evaluation of whether a banking organization has allocated sufficient resources for compliance and has appropriate controls in place may take into account the size of the banking organization and the risks associated with its operations and the products and services it offers). In general, banking organizations with complex international business operations that present risks of money laundering and terrorist financing are more challenged in their BSA programs and should devote significantly more resources to BSA compliance than smaller organizations with more limited, purely domestic operations.

Chairman Greenspan subsequently submitted the following in response to written questions received from Congresswoman Barbara Lee in connection with the February 11, 2004, hearing before the Committee on Financial Services:

1) Mr. Greenspan, I am concerned about HUD's shrinking budget and the investment HUD is making to housing through Section 8. The percentage of HUD sponsored subsidized rental vouchers in the Section 8 program is based on the Fair Market Rate; therefore, as the costs go up HUD compensates by increasing the amount of the vouchers.

HUD's mission is to provide safe, quality housing to its residents, would you agree with the system of increasing individual voucher costs based on the FMR of the unit. If so, would you also agree that the amount invested in public housing units should be based on the FMR instead of centralized cost figures determined by HUD administrators?

The design and implementation of subsidized housing programs is clearly an important policy issue. However, the details of the Section 8 program are well outside the Federal Reserve's areas of responsibility and expertise. I would suggest that you address your questions directly to officials at the Department of Housing and Urban Development.

2) Mr. Greenspan, the housing market has kept our economy afloat during this time of job loss and increasing deficits; do you agree that the implementation of a national housing production program would reinforce the current success of the housing market by producing more affordable housing?

The housing sector has been quite strong over the past two years, with real residential investment up nearly 10 percent over the four quarters of 2003 following a 7 percent advance in 2002. Looking forward, many analysts expect housing market activity to remain elevated, reflecting in part the low level of mortgage rates. That said, a robust rate of overall housing construction does not assure an adequate supply of affordable

housing. In setting budgetary priorities, the Congress may wish to consider whether affordable housing ranks high enough to warrant additional support.

3) Mr. Greenspan, the rate of foreclosures continues to rise. It concerns me that the Administration is only focusing on homeownership while the state of public housing and homeless assistance programs are underfunded.

As more and more families lose their homes and often find themselves in need of emergency/temporary housing assistance, do you believe it is a sound decision for HUD to eliminate the downpayment requirement for FHA homeownership loans?

The expansion of homeownership has long been an objective of government policy in the United States, and I strongly concur with this objective. As you note, however, the low-downpayment loans already offered by the FHA have experienced relatively high default rates, and HUD has borne the associated costs. Absent other changes, eliminating the downpayment requirement entirely would be expected to increase the default rate on FHA loans. The Congress and the Administration would need to weigh carefully the costs and benefits of expanding the FHA program in this direction.

Chairman Greenspan subsequently submitted the following in response to written questions received from Congressman Doug Ose in connection with the February 11, 2004, hearing before the Committee on Financial Services:

1. In the Plea Agreement negotiated by U.S. Attorney Debra Yang, Credit Lyonnais agreed to pay the Federal Reserve a monetary penalty of \$100 million. How did the Federal Reserve come to the \$100 million number? Does the Federal Reserve intend to use the money to offset the damages incurred by the policyholders and, if not, how does the Fed justify keeping that sum rather than compensating the policyholders who have suffered a definite and measurable loss as a result of the scandal involving Credit Lyonnais and Executive Life Insurance?

Under the Board's rules, civil money penalty amounts are assessed based on consideration of several statutory and policy factors, including the financial resources and good faith of the person or entity charged, the gravity of the misconduct, the history of previous misconduct, the economic benefit received as a result of the misconduct, and any other matters justice may require. The civil money penalty of \$100 million that the Federal Reserve assessed and that Credit Lyonnais agreed to pay for alleged violations of the banking laws was based on an application of these factors that the Federal Reserve takes into account in each civil money penalty case.

By law, civil money penalties that the Federal Reserve imposes must be transferred to the United States Treasury, and Federal Reserve has already transferred these funds to the Treasury. As you know, the Federal Reserve's civil money penalty was assessed as part of a larger settlement that Credit Lyonnais entered into with the Department of Justice to resolve criminal charges. The criminal plea agreement involved the payment by Credit Lyonnais of an additional \$100 million criminal fine, and the payment of \$375 million into a fund potentially for the benefit of Executive Life policyholders and others, depending on the outcome of the civil actions brought by the California Insurance Commissioner and others. A related settlement between the United States Attorney's Office and Artemis, S.A., resulted in \$110 million being made available to claimants immediately, and an additional \$75 million held for that purpose depending on the outcome of the pending civil lawsuits. Thus, as a result of the resolution of these investigations, \$560 million may ultimately be available to claimants, including policyholders.

2. Enclosed is a report by the Joint Economic Committee issued on October 14, 2003, discussing the discrepancy between figures presented in two Bureau of Labor Statistics surveys measuring employment in the United States. The payroll survey stated that the number of jobs declined by 1.0 million since the end of the recession in November 2001, while the household survey showed significant growth with the number of employed people has increased by 1.4 million, a 2.4 million "jobs gap." Do you agree or disagree with the assessments made by the Joint Economic Committee's

in this report? Do you agree or disagree that the population adjustments do not sufficiently explain the jobs gap and that more weight should be given to the household survey's measure of growth in self-employment? Is it accurate to say that two thirds of the jobs gap remains unexplainable? In the future, in what way should we utilize the strengths of each survey to get a more accurate assessment of the nation's job growth?

Your second question asked about my reaction to a report by the Joint Economic Committee that discussed the recent discrepancy between the employment figures presented in the Bureau of Labor Statistics' household and payroll employment surveys. As I indicated in response to a similar question during my recent testimony to the House Budget Committee, our assessment is that the data from the payroll survey generally are more accurate than those from the household survey. One reason for this conclusion is that the payroll survey is based on a much larger sample than is the household survey (400,000 establishments vs. 60,000 households). A second reason is that the payroll data are benchmarked each year to employment reports from the unemployment insurance tax system, which captures a large portion of wage and salary jobs.

In regards to the recent discrepancy between the two employment measures, our suspicion is that the household survey has overstated the rise in employment in recent years. In particular, the household survey's estimates of employment gains are made by first calculating the proportion of individuals in the monthly sample who have a job, and then scaling up that estimate based on population estimates developed by the Bureau of the Census. We suspect that the immigration assumptions that are implicit in the current population estimates are too high. If that is the case, then multiplying the employment-to-population ratios from the household survey by Census' population estimates will yield a rate of increase for employment that is overstated.

One caveat, which you note, is that the payroll data exclude self-employed individuals as well as some other smaller categories of employment that are included in the household employment counts, and thus adding those workers to the total payroll employment estimates probably provides a better estimate of overall employment. Making such an adjustment yields estimates of employment changes that are somewhat stronger than reported payroll employment over the past couple of years, but still significantly weaker than the published estimates of employment changes reported in the household survey. I have attached some additional materials provided to the staff of the Joint Economic Committee by Board staff; these materials present a more detailed analysis of these discrepancies.

Attachments



BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM
WASHINGTON, D. C. 20551

March 4, 2004

Mr. Chris Frenze
Chief Economist
Joint Economic Committee
Washington, D.C. 20510

Dear Mr. Frenz:

Win Hambley asked me to respond to your question about the differences between the household and payroll survey measures of employment. Our work at the Federal Reserve is based on extensive discussions with staff at both the Bureau of Labor Statistics (BLS) and the Census Bureau about how to reconcile the two measures of employment. As you may know, the BLS conducted a review of the differences between the two surveys that can be found on its web site at <http://stats.bls.gov/bls/fesacp2101703.pdf>. That review identified the differences that can readily be measured and explored a number of other hypotheses about the statistical properties of the two surveys that might account for differences that cannot be readily measured.¹ The BLS has also posted a special notice on its web site on "Recent trends in employment from the BLS household and payroll surveys" at <http://www.bls.gov/cps/home.htm>.

Using the data available on the measurable differences between the two surveys, we maintain a monthly reconciliation that is shown on the attached table and chart. I have also included a description of the adjustments that we make in the reconciliation. Column 11 of the table and the bottom panel of the chart show the gap between the reported payroll series and an estimate of household employment adjusted for its conceptual differences from the payroll series and for updates to estimates of the working-age population. As you can see, over the period shown on the table, these adjustments, on net, have reduced the level of household employment. In January, these adjustments for the measured conceptual differences between the two series explained almost all of the discrepancy in the levels of the two series. However, as shown in the chart, the discrepancy had climbed to almost 4 million jobs in 2000, as the rise in nonfarm payroll employment between 1990 and 2000 outstripped the adjusted household series. What has attracted attention recently has been the relative weakness of the payroll survey, which has closed that gap.

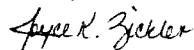
¹ Among those hypotheses are several related to the inability of the CPS to capture some types of jobs, such as secondary jobs of active military personnel, employment among the institutional population, and foreign commuters employed by U.S. companies; reporting problems related to undocumented workers; and problems related to the different reference periods for the two surveys.

As indicated in the chart, this type of cyclical pattern has occurred before although the swings have not been so wide. During periods of rapidly expanding economic activity, payroll employment has tended to increase faster than household employment. That gap has tended to shrink during economic contractions when household employment does not decline as much as the payroll series. Neither we, nor any other analysts who have studied this issue, have been able to fully explain this cyclical pattern, and we do not know why the most recent episode has been more exaggerated than the earlier ones.

Over time, another important source of the discrepancy between the levels of household and payroll employment has been shortfalls in the Census Bureau's estimates of inter-censal population growth. That is, the level of household employment can deviate from the level of payroll employment as the population estimates extend beyond the benchmark adjustment to Census-year population controls. The population controls are a mechanism by which the Census and the BLS adjust sample estimates of employment and unemployment from the monthly Current Population Survey to national totals. Indeed, before the update of the household figures to the 2000 Census in January 2003, the average monthly discrepancy between the levels of payroll and adjusted employment for 2002 was more than 4 million. After the adjustment for the new Census levels, the level of household employment was raised roughly 2-1/2 million and about 60 percent of the discrepancy was revised away. In January 2004, the BLS introduced another update to the population, which reduced the adjusted household figure slightly; at the same time, the payroll figures were rebenchmarked to the levels of employment shown on the March 2003 unemployment insurance tax files. The two downward adjustments were roughly similar and did not change the discrepancy significantly.

Please let me know if you have any further questions.

Sincerely,



Joyce K. Zickler
Deputy Associate Director
Division of Research and Statistics

Attachment
Reconciliation of Household and Payroll Employment

The attached table and chart present data related to the reconciliation of the household and payroll employment series. Table 1 shows the monthly reconciliation of household and payroll employment beginning in January 2002. To bring the definition of the household series in line with the payroll concept, we subtract agricultural workers, the self-employed, unpaid family workers, private household workers, and workers on unpaid absences from the household employment series and add back in multiple job holders, and an estimate of the number of 15-year-old wage and salary workers. With the exception of the data on 15-year-olds and multiple job holders, we use the monthly data that are readily available from the BLS. The estimates for 15-year-olds are based on our staff's review of historical data on employment among this age group.

The BLS measure of total multiple job holding includes individuals whose jobs may not meet the payroll definition. To construct a monthly estimate of multiple job holding that meets the payroll definition, we multiply this BLS measure by the percent of individuals whose secondary jobs meet the payroll definition and add an estimate of the number of multiple job holders with more than two jobs. The percentage of multiple job holders with valid payroll jobs is calculated as the sum of the percentage of multiple job holders with both valid primary and secondary jobs plus the percentage with valid secondary jobs. The BLS provides us with quarterly data from the CPS on the number of multiple job holders who are nonagricultural wage and salary workers on both their primary and secondary jobs, which we interpolate and seasonally adjust to get a monthly estimate. To this we add the average percentage from 1996-2000 of multiple job holders whose primary jobs fail to meet the payroll definition but whose secondary jobs do. Our estimate of the number of multiple job holders with more than two jobs is based on the 1997 annual average of the fraction of multiple job holders holding three or more jobs.

All of our estimates for data from the household survey include our adjustments for the Census Bureau's updates to population weights in 1989, 1997, 1998, 1999, 2000, 2003, and 2004. When the BLS introduces these adjustments, it does not revise its historical data, creating breaks in the series. Our estimates wedge the effect of the new levels back over the historical period during which the change occurred.

We also make adjustments for the CPS redesign introduced in January 1994. To adjust the pre-1994 data for the effects of the CPS redesign, we use the multiplicative factors taken from a BLS research paper.¹ We apply separate factors to the individual employment components that make up the adjustment to the payroll concept and then aggregate to construct the total adjusted household employment series. Prior to the redesign, data on multiple job holding were available only for special CPS supplements. To construct the monthly time series, we interpolate between these supplements.

¹ Anne Polivka and Stephen Miller, "The CPS After the Redesign: Refocusing the Lens," which is available on the BLS web site at: <http://www.bls.gov/ore/abstract/ec/ec950090.htm>.

In addition, the data for 1997 and before have been adjusted to reflect the introduction of new estimation procedures for the household survey implemented by the BLS in February 1998.

March 5, 2004

Table 1
Reconciliation of Household and Payroll Employment
(Seasonally adjusted, in thousands)

| | (1) | (2) | Adjustments | | | | | Plus | | | | (11) | Memo (12) | |
|------------|---------|---------|-------------|-------|-------|-------|-------|------|-----|---------|-------|---------|--------------|--|
| | | | Less | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | | | |
| 2002: Feb. | 130,404 | 136,570 | 2,377 | 8,720 | 852 | 1,731 | 5,001 | 400 | 408 | 128,699 | 1,705 | 136,362 | | |
| Mar. | 130,447 | 136,323 | 2,352 | 8,699 | 831 | 1,902 | 5,037 | 402 | 414 | 128,382 | 2,065 | 136,106 | | |
| Apr. | 130,379 | 136,322 | 2,379 | 8,793 | 834 | 1,749 | 5,133 | 411 | 404 | 128,514 | 1,865 | 136,096 | | |
| May | 130,381 | 136,740 | 2,274 | 8,936 | 791 | 1,899 | 4,988 | 399 | 402 | 128,629 | 1,752 | 136,505 | | |
| June | 130,406 | 136,597 | 2,195 | 8,852 | 879 | 1,894 | 5,088 | 408 | 403 | 128,684 | 1,722 | 136,352 | | |
| July | 130,295 | 136,731 | 2,241 | 8,900 | 862 | 1,915 | 5,114 | 410 | 397 | 128,599 | 1,696 | 136,478 | | |
| Aug. | 130,306 | 137,073 | 2,151 | 8,997 | 846 | 1,775 | 5,112 | 411 | 402 | 129,245 | 1,061 | 137,337 | | |
| Sept. | 130,339 | 137,508 | 2,233 | 9,075 | 842 | 1,775 | 5,112 | 414 | 408 | 129,618 | 1,641 | 137,079 | | |
| Oct. | 130,342 | 137,859 | 2,436 | 9,393 | 892 | 1,849 | 5,153 | 412 | 407 | 129,070 | 1,272 | 137,075 | | |
| Nov. | 130,305 | 136,834 | 2,301 | 9,244 | 906 | 1,730 | 5,178 | 414 | 393 | 128,638 | 1,667 | 136,545 | | |
| Dec. | 130,096 | 136,757 | 2,350 | 9,265 | 809 | 1,806 | 5,263 | 421 | 391 | 128,603 | 1,493 | 136,459 | | |
| 2003: Jan. | 130,190 | 137,138 | 2,286 | 9,319 | 746 | 1,793 | 5,177 | 414 | 388 | 128,962 | 1,228 | 137,447 | | |
| Feb. | 130,031 | 137,000 | 2,200 | 9,227 | 727 | 1,990 | 5,231 | 418 | 383 | 128,889 | 1,142 | 137,318 | | |
| Mar. | 129,921 | 136,973 | 2,242 | 9,129 | 718 | 1,891 | 5,059 | 408 | 372 | 128,672 | 1,098 | 137,590 | | |
| Apr. | 129,873 | 137,260 | 2,188 | 9,132 | 839 | 1,899 | 5,113 | 409 | 375 | 128,989 | 894 | 137,505 | | |
| May | 129,859 | 137,319 | 2,123 | 9,234 | 956 | 1,779 | 5,116 | 412 | 372 | 129,057 | 864 | 137,573 | | |
| June | 129,814 | 137,240 | 2,211 | 9,291 | 1,017 | 1,899 | 5,025 | 402 | 371 | 128,621 | 1,193 | 137,604 | | |
| July | 129,789 | 137,320 | 2,321 | 9,501 | 973 | 1,879 | 5,242 | 419 | 374 | 128,682 | 1,107 | 137,693 | | |
| Aug. | 129,856 | 137,262 | 2,335 | 9,376 | 893 | 1,830 | 4,955 | 394 | 371 | 128,520 | 1,336 | 137,644 | | |
| Sept. | 129,844 | 137,704 | 2,401 | 9,534 | 892 | 1,826 | 5,234 | 426 | 370 | 129,449 | 695 | 138,095 | | |
| Oct. | 129,944 | 138,133 | 2,411 | 9,514 | 885 | 1,820 | 5,254 | 420 | 378 | 129,586 | 441 | 138,735 | | |
| Nov. | 130,027 | 138,070 | 2,218 | 9,450 | 885 | 2,183 | 5,026 | 402 | 371 | 129,114 | 921 | 138,479 | | |
| Dec. | 130,035 | 138,566 | 2,163 | 9,501 | 907 | 1,885 | 5,234 | 419 | 379 | 129,142 | -10 | 138,566 | | |
| 2004: Jan. | 130,153 | 138,301 | 2,190 | 9,498 | 902 | 1,965 | 5,053 | 404 | 373 | 129,576 | 577 | 138,301 | | |
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Change over the 12 months ended February 2004

(1) Nonfarm payroll employment.
(2) Household employment, corrected for updates to population.

(3) Self-employed.

(4) Unpaid family and private household.

(5) Unpaid family and private household.

(6) Unpaid family and private household.

(7) Multiple job holders who are nonfarm, nonprivate household, wage and salary workers on their secondary job.

(8) Estimate of jobs beyond secondary held by multiple job holders.

(9) Estimate of jobs beyond secondary held by multiple job holders.

(10) Adjusted household.

(11) Nonfarm payroll minus adjusted household.

(12) Household employment, as published.

March 5, 2004

Table 1a
Reconciliation of Household and Payroll Employment
Net Change from Previous Month
(Seasonally adjusted, in thousands)

| | Adjustments | | | | | | | | | | | | Memo (12) |
|------------|-------------|------|------|------|-----|------|------|-----|-----|-------|------|------|--------------|
| | Less | | | | | | Plus | | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | | |
| 2002: Feb. | -90 | 656 | 13 | 104 | -26 | -91 | 70 | 6 | 3 | 735 | -825 | 647 | |
| Mar. | 43 | -247 | -25 | -20 | -21 | 170 | 26 | 2 | 5 | -318 | -361 | -256 | |
| Apr. | -68 | -1 | 27 | 94 | 3 | -153 | 106 | 8 | -9 | 132 | -200 | -10 | |
| May | 2 | 418 | -105 | 144 | -43 | 149 | -145 | -12 | -2 | 115 | -113 | 409 | |
| June | 25 | -143 | -79 | -84 | 88 | 74 | 109 | 2 | 1 | 52 | -30 | -152 | |
| July | -111 | 134 | 150 | 20 | -20 | -140 | 27 | 2 | 1 | 125 | -26 | 125 | |
| Aug. | 11 | 342 | 150 | 58 | -23 | -140 | 9 | 1 | 16 | 646 | -435 | 331 | |
| Sept. | -47 | 535 | 142 | 78 | -4 | -0 | 39 | 3 | 11 | 373 | -420 | 526 | |
| Oct. | 83 | -249 | 113 | 19 | 50 | 74 | -20 | -2 | -1 | -548 | 631 | -258 | |
| Nov. | -37 | -77 | -125 | 151 | 14 | -119 | 26 | 2 | -14 | -432 | 395 | -534 | |
| Dec. | -209 | -77 | 49 | 21 | -98 | 76 | 85 | 7 | -2 | -35 | -174 | -86 | |
| 2003: Jan. | 94 | 381 | -54 | 55 | -62 | -13 | -87 | -7 | 3 | 359 | -265 | 988 | |
| Feb. | -159 | -138 | -96 | -93 | -19 | 197 | 55 | -4 | -5 | -73 | -86 | -129 | |
| Mar. | -110 | -27 | 30 | -48 | -49 | -188 | -135 | -11 | -11 | -17 | -93 | -18 | |
| Apr. | -20 | 269 | -73 | -18 | 40 | 101 | -21 | -2 | 5 | 201 | -221 | 278 | |
| May | -28 | -82 | 32 | -30 | 33 | 107 | 38 | 3 | -1 | -84 | 56 | -73 | |
| June | -14 | 159 | 35 | 102 | 107 | -120 | 33 | 3 | -3 | -68 | 382 | 168 | |
| July | -45 | -78 | -12 | 56 | 61 | 120 | -122 | -10 | -1 | -46 | 386 | 89 | |
| Aug. | -25 | 80 | 110 | 210 | -44 | -20 | 217 | 17 | 3 | 61 | -86 | 89 | |
| Sept. | 67 | -58 | 14 | -126 | -80 | -49 | -117 | -25 | -3 | -162 | 229 | -49 | |
| Oct. | 88 | 442 | 69 | 58 | -24 | -0 | 37 | -23 | -1 | 729 | -641 | 451 | |
| Nov. | 83 | 429 | 9 | 58 | -74 | 57 | 92 | 36 | -6 | 337 | -354 | 438 | |
| Dec. | 8 | -63 | -173 | -65 | 30 | 363 | -229 | -18 | -7 | -472 | 480 | -54 | |
| 2004: Jan. | 97 | 496 | -75 | 51 | 22 | -298 | 208 | 17 | 8 | 1,028 | -931 | 87 | |
| Feb. | 21 | -265 | 27 | -3 | -5 | 80 | -181 | -14 | -6 | -566 | 587 | -265 | |

- (1) Nonfarm payroll employment.
 (2) Household employment, corrected for updates to population.
 (3) Agriculture.
 (4) Self-employed.
 (5) Unpaid family and private household.
 (6) Multiple job holders who are nonfarm nonprivate household wage and salary workers on their secondary jobs.
 (7) Multiple job holders who are nonfarm nonprivate household wage and salary workers on their secondary jobs.
 (8) Estimate of jobs beyond secondary held by multiple job holders.
 (9) Estimate of 15-year-old wage and salary workers.
 (10) Adjusted household.
 (11) Nonfarm payroll minus adjusted household.
 (12) Household employment, as published.

March 5, 2004

Table 1b
Reconciliation of Household and Payroll Employment
Average Monthly Change from Three Months Earlier
(Seasonally adjusted, in thousands)

| | (1) | (2) | Adjustments | | | | | Plus | | | | | Memo (12) |
|------------|------|------|-------------|-----|-----|-----|-----|------|-----|------|------|------|--------------|
| | | | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | | |
| 2002: Feb. | -156 | 52 | 48 | -49 | -16 | -76 | 4 | 0 | -4 | 144 | -300 | 43 | |
| Mar. | -71 | 118 | 20 | -59 | -15 | -24 | 67 | 2 | -2 | 133 | -216 | 127 | |
| Apr. | -38 | 157 | 4 | 72 | -20 | 56 | -4 | -0 | -2 | 132 | -216 | 48 | |
| May | -18 | 157 | -34 | 51 | 16 | 22 | 23 | 2 | -3 | 101 | -115 | 82 | |
| June | -14 | 91 | -11 | 49 | 12 | 55 | -3 | -0 | -1 | 28 | -56 | 127 | |
| July | -28 | 136 | -41 | 20 | 18 | -41 | 49 | 4 | -2 | 205 | -230 | 102 | |
| Aug. | -25 | 111 | -32 | 74 | -12 | -40 | 25 | 2 | 2 | 311 | -360 | 328 | |
| Sept. | -49 | 337 | 32 | 57 | 11 | -12 | 15 | 1 | -1 | -22 | -282 | -89 | |
| Oct. | 16 | 209 | 57 | 81 | 20 | -12 | 15 | 1 | -1 | -22 | -282 | -89 | |
| Nov. | 16 | 209 | 57 | 81 | 20 | -12 | 15 | 1 | -1 | -22 | -282 | -89 | |
| Dec. | -54 | -284 | 19 | 63 | -11 | 10 | 30 | 2 | -6 | -338 | 284 | -293 | |
| 2003: Jan. | -51 | -74 | -43 | 75 | -49 | -19 | 8 | 1 | -7 | -36 | -15 | 123 | |
| Feb. | -91 | 55 | -34 | -6 | -60 | 86 | 18 | 1 | -4 | 84 | -175 | 258 | |
| Mar. | -58 | 72 | -40 | -28 | -11 | 35 | -56 | -4 | -4 | 57 | -133 | 240 | |
| Apr. | -56 | 55 | -46 | -32 | 41 | -30 | -39 | -3 | -2 | 33 | -86 | 62 | |
| May | -21 | 115 | -2 | 18 | 60 | -4 | 17 | 1 | 0 | 61 | -82 | 124 | |
| June | -29 | -0 | 18 | 43 | 67 | 2 | -17 | -1 | -2 | -151 | 122 | 9 | |
| July | -28 | 54 | 44 | 123 | 41 | -7 | 43 | 3 | -1 | -102 | 174 | 63 | |
| Aug. | -1 | -19 | 37 | 47 | -21 | 17 | -74 | -6 | -0 | -179 | 178 | 110 | |
| Sept. | 43 | 155 | 64 | 48 | -49 | 8 | 102 | 0 | -1 | 302 | -232 | 280 | |
| Oct. | 79 | 271 | 30 | 4 | -3 | -28 | 34 | 3 | 0 | 198 | -138 | 278 | |
| Nov. | 60 | 269 | -32 | 25 | -3 | 118 | 34 | 3 | 0 | 198 | -138 | 278 | |
| Dec. | 63 | 287 | -80 | 22 | 13 | 3 | -32 | -3 | 3 | 298 | -235 | 157 | |
| 2004: Jan. | 42 | 56 | -74 | -5 | 16 | 48 | -67 | -5 | -2 | -3 | 45 | -77 | |

- (1) Nonfarm payroll employment.
 (2) Household employment, corrected for updates to population.
 (3) Self-employed.
 (4) Self-employed.
 (5) Unpaid family and private household.
 (6) Unpaid absences.
 (7) Multiple job holders who are nonfarm nonprivate household wage and salary workers on their secondary jobs.
 (8) Multiple job holders who are nonfarm nonprivate household wage and salary workers on their secondary jobs.
 (9) Estimate of 15-year-old wage and salary workers.
 (10) Adjusted household.
 (11) Nonfarm payroll minus adjusted household.
 (12) Household employment, as published.

Chart 1

